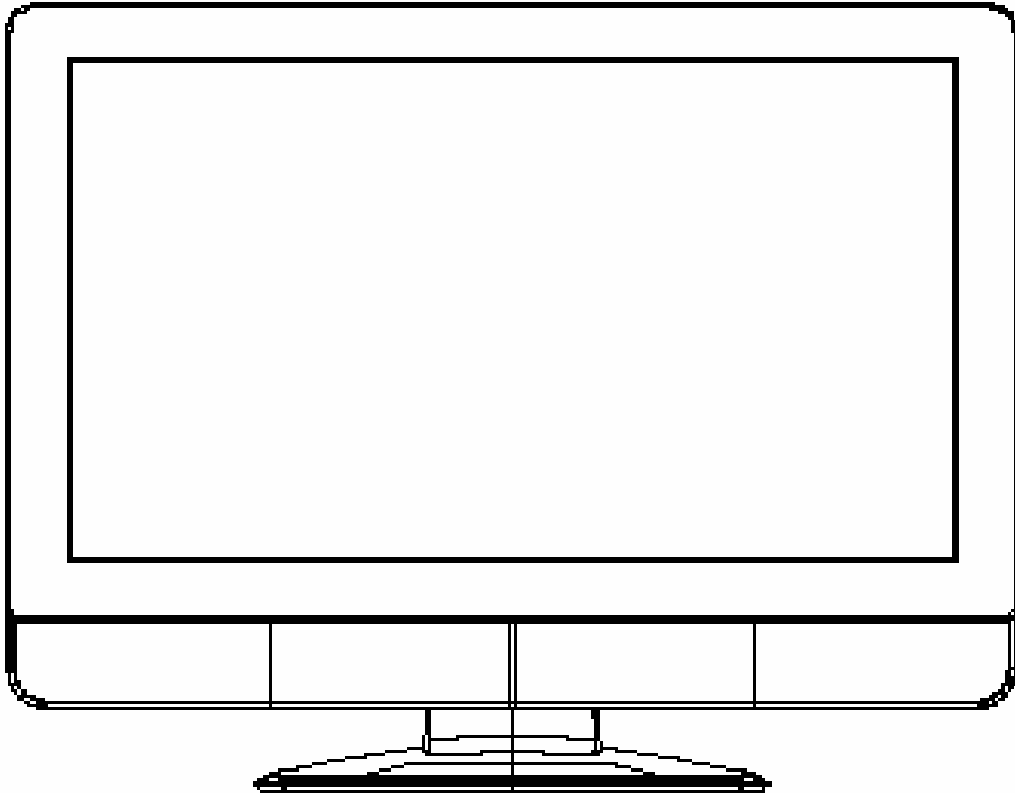


# Service Manual



**Model #: VIZIO VX32L HDTV**

V, Inc

320A Kalmus Drive Costa Mesa, CA 92626

TEL : +714-668-0588 FAX :+714-668-9099

*Top Confidential*

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### *Appendix*

1. Main Board Circuit Diagram
2. Main Board PCB Layout
3. Assembly Explosion Drawing  
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#### FCC INFORMATION

This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause unacceptable interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures -- reorient or relocate the receiving antenna; increase the separation between equipment and receiver; or connect the into an outlet on a circuit different from that to which the receiver is connected.

#### FCC WARNING

To assure continued FCC compliance, the user must use a grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, any unauthorized changes or modifications to Amtrak products will void the user's authority to operate this device. Thus VINC Will not be held responsible for the product and its safety.

#### CE CERTIFICATION

This device complies with the requirements of the EEC directive 89/336/EEC with regard to "Electromagnetic compatibility."

#### SAFETY CAUTION

Use a power cable that is properly grounded. Always use the AC cords as follows – USA (UL); Canada (CSA); Germany (VDE); Switzerland (SEV); Britain (BASEC/BS); Japan (Electric Appliance Control Act); or an AC cord that meets the local safety standards.

# Chapter 1      Features

---

1. Built in TV channel selector for TV viewing
2. Simultaneous display of PC and TV images
3. Connectable to PC's analog RGB port
4. Built in S-video, HDTV, composite video, HDMI and TV out
5. Built in auto adjust function for automatic adjustment of screen display
6. Smoothing function enables display of smooth texts and graphics even if image with resolution lower than 1366x768 is magnified
7. Picture In Picture (PIP) function to show TV or VCR/DVD images
8. Power saving to reduce consumption power to less than 3W
9. On Screen Display: user can define display mode (i.e. color, brightness, contrast, sharpness, backlight), sound setting, PIP, TV channel program, aspect and gamma or reset all setting.

# Chapter 2 Specification

---

## 1. LCD CHARACTERISTICS

### LC320W01

Item	Specification
Active Screen Size	31.51(800.4mm) inch diagonal
Outline Dimension	760.0mm(H) x 450.0mm(V) x 48.0mm(D) (Typ.)
Pixel Pitch	0.17025mm x 0.51075mm xRGB
Pixel Format	1366 (R,G,Bx3) x 768
Display Color	16.7 M (8-bit + FRC for R,G,B)
Luminance, White	500 cd/m <sup>2</sup> (Typ)
Viewing Angle(L/R/U/D)	89/89/89/89
Power Consumption	84 Watt (Typ.) (Vdd line +CCFL line)(at 3.5A)
Weight	6900g (Typ)
Display Mode	Transmissive mode, normally black
Surface Treatment	Hard coating(3H), AG

## 2. OPTICAL CHARACTERISTICS

Viewing Angle (CR>10)

Left: 89°typ.

Right: 89°typ.

Top: 89°typ.

Bottom: 89°typ.

## 3. SIGNAL (Refer to the Timing Chart)

Sync Signal

1) Type: TMDS

2) Input Voltage Level: 100~240 Vac, 50/ 60 Hz

## 4.Input Connectors

RJ11, D-SUB15PIN (MINI, 3rows), HDMIX2, RCAX2 (component), RCAX2 (AUDIO in), RCAX2 (composite), RCAX2 (AUDIO in), S-Video, Tuner

### Output Connectors

Analog audio out (Stereo RCA Jack) , Digital audio out (Optical)

---

## **5. POWER SUPPLY**

Power Consumption: 180W MAX

Power OFF: to less than 3W MAX

## **6. Speaker**

Output 10W (max) X2

## **7. ENVIRONMENT**

7-1. Operating Temperature: 5c~35c (Ambient)

7-2. Operating Humidity: Ta= 35 °C, 90%RH (Non-condensing)

7-3. Operating Altitude: 0 - 14,000 feet (Non-Operating)

## **8. DIMENSIONS (Physical dimension)**

Width: 797.00 mm.

Depth: 593.00mm

Height: 263.7mm

## **9. WEIGHT (Physical weight)**

a. Net: 15.0+/-0.5kgs

b. Gross: 20+/-0.5kgs

Please pay attention to the followings when you use this TFT LCD module.

### **9-1. MOUNTING PRECAUTIONS**

(1) You must mount a module using holes arranged in four corners or four sides.

(2) You should consider the mounting structure so that uneven force (ex. Twisted stress) is not applied to the module. And the case on which a module is mounted should have sufficient strength so that external force is not transmitted directly to the module.

(3) Please attach the surface transparent protective plate to the surface in order to protect the polarizer.

Transparent protective plate should have sufficient strength in order to resist external force.

(4) You should adopt radiation structure to satisfy the temperature specification.

- 
- (5) Acetic acid type and chlorine type materials for the cover case are not desirable because the former generates corrosive gas of attacking the polarizer at high temperature and the latter causes circuit break by electro-chemical reaction.
  - (6) Do not touch, push or rub the exposed polarizers with glass, tweezers or anything harder than HB pencil lead. And please do not rub with dust clothes with chemical treatment.  
Do not touch the surface of polarizer for bare hand or greasy cloth. (Some cosmetics are detrimental to the polarizer.)
  - (7) When the surface becomes dusty, please wipe gently with absorbent cotton or other soft materials like chamois soaked with petroleum benzene. Normal-hexane is recommended for cleaning the adhesives used to attach front / rear polarizers. Do not use acetone, toluene and alcohol because they cause chemical damage to the polarizer.
  - (8) Wipe off saliva or water drops as soon as possible. Their long time contact with polarizer causes deformations and color fading.
  - (9) Do not open the case because inside circuits do not have sufficient strength.

## **9-2. OPERATING PRECAUTIONS**

- (1) The spike noise causes the mis-operation of circuits. It should be lower than following voltage :  
 $V = \pm 200\text{mV}$  (Over and under shoot voltage)
- (2) Response time depends on the temperature. (In lower temperature, it becomes longer.)
- (3) Brightness depends on the temperature. (In lower temperature, it becomes lower.) And in lower temperature, response time (required time that brightness is stable after turned on) becomes longer.
- (4) Be careful for condensation at sudden temperature change. Condensation makes damage to polarizer or electrical contacted parts. And after fading condensation, smear or spot will occur.
- (5) When fixed patterns are displayed for a long time, remnant image is likely to occur.
- (6) Module has high frequency circuits. System manufacturers shall do sufficient suppression to the electromagnetic interference. Grounding and shielding methods may be important to minimize the interference.

---

### **9-3. HANDLING PRECAUTIONS FOR PROTECTION**

- (1) The protection film is attached to the bezel with a small masking tape. When the protection film is peeled off, static electricity is generated between the film and polarizer. This should be peeled off slowly and carefully by people who are electrically grounded and with well ion-blown equipment or in such a condition, etc.
- (2) When the module with protection film attached is stored for a long time, sometimes there remains a very small amount of glue still on the bezel after the protection film is peeled off.
- (3) You can remove the glue easily. When the glue remains on the bezel surface or its vestige is recognized, please wipe them off with absorbent cotton waste or other soft material like chamois soaked with normal-hexane.



## Chapter 3 On Screen Display

---

### **Main unit button**

Power

MENU

CH ▲

CH ▼

VOL +

VOL -

Input

TV Source

A. PICTURE :

- a. PICTURE MODE (CUSTOM/ STANDARD / MOVIE / GAME)
- b. BACKLIGHT (0~100)
- c. BRIGHTNESS (0~100)
- d. CONTRAST (0~100)
- e. COLOR (0~100)
- f. TINT (-32~32)
- g. SHARPNESS (0~100)
- h. COLOR TEMPERATURE (CUSTOM/COOL/NORMAL/WARM)
- i. ADVANCED VIDEO
  - i-1. DNR(OFF/LOW/MEDIUM/STRONG)
  - i-2. BLACK LEVEL EXTENDER (ON/OFF)
  - i-3. WHITE PEAK LIMITATOR (ON/OFF)
  - i-4 CTI(OFF/LOW/MEDIUM/STRONG)
  - i-5 FLESH TONE (ON/OFF)
  - i-6 ADAPTIVE LUMA (ON/OFF)

---

B. AUDIO :

- a. VOLUME (0~100)
- b. BASS (0~100)
- c. TREBLE (0~100)
- d. BALANCE (-50~50)
- e. SURROUND (ON/OFF)
- f. SPEAKERS (ON/OFF)

C. TV :

- a. TUNER MODE (ANTENNA/CABLE)
- b. AUTO SEARCH (RUN)
- c. SKIP CHANNEL (TABLE)
- d. TIME ZONE  
(HAWALL/EASTTERN/INDIANA/CENTRAL/MOUNTAIN/ARIZONA/PACIFIC/ALA  
SKA)
- e. Daylight Saving(ON/OFF)

D. SETUP :

- a. LANGUAGE (ENGLISH/FRENCH/SPANISH)
- b. SLEEP TIMER (OFF/30/60/90/120)
- c. ANALOG CC (OFF/CC1/CC2/CC3/CC4)
- d. DIGITAL CC(OFF/SERVICE1/ SERVICE2/ SERVICE3/ SERVICE4/ SERVICE5/  
SERVICE6)
- e. DIGITAL CC STYLE
  - e-1. CAPTION STYLE  
(AS BROADCASTER/CUSTOM)
  - e-2. FONT SIZE(SMALL/MEDIUM/LARGE)
  - e-3. FONT COLOR  
(GREEN/BLUE//RED/CYAN/YELLOW/MAGENTA/BLACK/WHITE)
  - e-4. FONT OPACITY  
(SOLID/TRANSLUCENT/TRANSPARENT)
  - e-5. BACKGROUND COLOR  
(GREEN/BLUE//RED/CYAN/YELLOW/MAGENTA/BLACK/WHITE)
  - e-6. BACKGROUND OPACITY  
(SOLID/TRANSLUCENT/TRANSPARENT)

- 
- e-7. WINDOW COLOR  
(GREEN/BLUE//RED/CYAN/YELLOW/MAGENTA/BLACK/WHITE)
  - e-8. WINDOW OPATITY  
(SOLID/TRANSLUCENT/TRANSPARENT)
  - f. RESET ALL SETTING

E. PARENTAL :

- a. PASSWORD
  - a-1. CHANNEL BLOCK
  - a-2. TV RATING
  - a-3. MOVIE RATING
  - a-4. BLOCK TV UNRATED
  - a-5. ACCESS CODE EDIT

## RGB Mode

A. PICTURE ADJUST :

- a. AUTO PICTURE (Run)
- b. BACKLIGHT (0~100)
- c. BRIGHTNESS (0~100)
- d. CONTRAST (0~100)
- e. COLOR TEMPERATURE(CUSTOM, 6500K, 9300K)
- f. H-SIZE (0~255)
- g. H-POSITION (0~100)
- h. V-POSITION (0~100)
- i. FINE TUNE (0~31)

B. AUDIO :

- a. VOLUME (0~100)
- b. BASS (0~100)
- c. TREBLE (0~100)
- d. BALANCE (-50~50)
- e. SURROUND (ON/OFF)
- f. SPEAKERS (ON/OFF)

---

C. SETUP :

- a. LANGUAGE (ENGLISH/FRENCH/SPANISH)
- b. SLEEP TIMER (OFF/30/60/90/120)
- RESET ALL SETTING

## AV COMPONENT MODE

AV-C 、 AV-S 、 COMPONENT

A. PICTURE :

- a. PICTURE MODE (CUSTOM/ STANDARD / MOVIE / GAME)
- b. BACKLIGHT (0~100)
- c. BRIGHTNESS (0~100)
- d. CONTRAST (0~100)
- e. COLOR (0~100)
- f. TINT (-32~32)
- g. SHARPNESS (0~100)
- h. COLOR TEMPERATURE (CUSTOM/COOL/NORMAL/WARM)
- i. ADVANCED VIDEO
  - i-1. DNR(OFF/LOW/MEDIUM/STRONG)
  - i-2. BLACK LEVEL EXTENDER (ON/OFF)
  - i-3. WHITE PEAK LIMITATOR (ON/OFF)
  - i-4. CTI(OFF/LOW/MEDIUM/STRONG)
  - i-5. FLESH TONE (ON/OFF)
  - i-6. ADAPTIVE LUMA (ON/OFF)

---

B. AUDIO :

- a. VOLUME (0~100)
- b. BASS (0~100)
- c. TREBLE (0~100)
- d. BALANCE (-50~50)
- e. SURROUND (ON/OFF)
- f. SPEAKERS (ON/OFF)

D. SETUP :

- a. LANGUAGE (ENGLISH/FRENCH/SPANISH)
- b. SLEEP TIMER (OFF/30/60/90/120)
- c. RESET ALL SETTING

E. PARENTAL :

- a. PASSWORD
  - a-1. CHANNEL BLOCK
  - a-2. TV RATING
  - a-3. MOVIE RATING
  - a-4. BLOCK TV UNRATED
  - a-5. ACCESS CODE EDIT

---

## HDMI MODE :

### A. PICTURE :

- a. PICTURE MODE (CUSTOM/ STANDARD / MOVIE / GAME)
- b. BACKLIGHT (0~100)
- c. BRIGHTNESS (0~100)
- d. CONTRAST (0~100)
- e. COLOR (0~100)
- f. TINT (-32~32)
- g. SHARPNESS (0~100)
- h. COLOR TEMPERATURE (CUSTOM/COOL/NORMAL/WARM)
- i. ADVANCED VIDEO
  - i-1. DNR(OFF/LOW/MEDIUM/STRONG)
  - i-2. BLACK LEVEL EXTENDER (ON/OFF)
  - i-3. WHITE PEAK LIMITATOR (ON/OFF)
  - i-4 CTI(OFF/LOW/MEDIUM/STRONG)
  - i-5 FLESH TONE (ON/OFF)
  - i-6 ADAPTIVE LUMA (ON/OFF)

### B. AUDIO :

- a. VOLUME (0~100)
- b. BASS (0~100)
- c. TREBLE (0~100)
- d. BALANCE (-50~50)
- e. SURROUND (ON/OFF)
- f. SPEAKERS (ON/OFF)

---

C. SETUP :

- a. LANGUAGE (ENGLISH/FRENCH/SPANISH)
- b. SLEEP TIMER (OFF/30/60/90/120)

RESET ALL SETTING

## Chapter4      Factory preset timings

---

This timing chart is already preset for the TFT LCD analog & digital display monitors.

Resolution	Refresh rate	Horizontal Frequency	Vertical Frequency	Horizontal Polarity	Vertical Polarity	Pixel Rate
640x480	60Hz	31.5kHz	59.94Hz	N	N	25.175
640x480	75Hz	37.5kHz	75.00Hz	N	N	31.500
800X600	60Hz	37.9kHz	60.317Hz	P	P	40.000
800x600	75Hz	46.9kHz	75.00Hz	P	P	49.500
800X600	85Hz	53.7kHz	85.06Hz	P	P	56.250
1024x768	60Hz	48.4kHz	60.01Hz	N	N	65.000
1024X768	75Hz	60.0kHz	75.03Hz	P	P	78.750
720x400	70Hz	31.46kHz	70.08Hz	N	P	28.320
1366X768	60	47.7KHZ	60.00HZ	P	N	85.500

Remark:      P: positive      N: negative

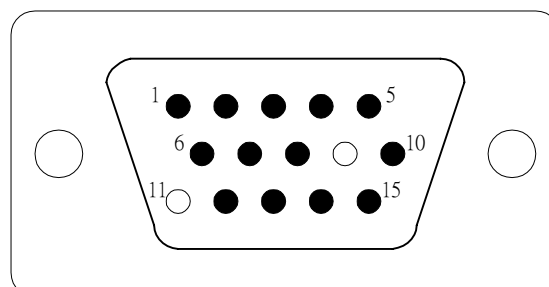


## Chapter5 Pin Assignment

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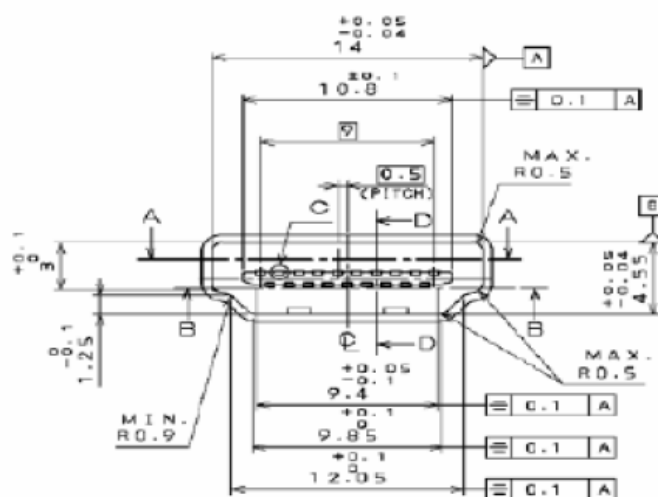
The TFT LCD analog display monitors use a 15 Pin Mini D-Sub connector as video input source.

Pin	Description
1	Red
2	Green
3	Blue
4	Ground
5	Ground
6	R-Ground
7	G-Ground
8	B-Ground
9	+5V for DDC
10	Ground
11	No Connection
12	(SDA)
13	H-Sync (Composite Sync)
14	V-Sync
15	(SCL)

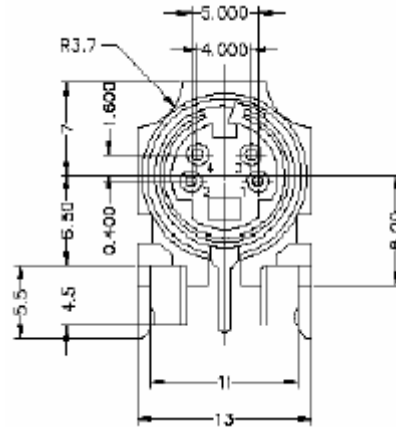


## HDMI CONNECT PIN ASSIGNMENT

PIN	SIGNAL ASSIGNMENT
1	TMDS Data2+
2	TMDS Data2 Shield
3	TMDS Data2-
4	TMDS Data1+
5	TMDS Data1 Shield
6	TMDS Data1-
7	TMDS Data0+
8	TMDS Data0 Shield
9	TMDS Data0-
10	TMDS Clock+
11	TMDS Clock Shield
12	TMDS Clock-
13	CEC
14	Reserved (N.C on device)
15	SCL
16	SDA
17	DDC/CEC Ground
18	+5V Power
19	Hot Plug Detect



### a. Pin Assignment



- b. Signal Level Video (Y): Analog 0.1Vp-p/75Ω  
Video (C): Analog 0.286p-p/75  
Sync (H+V): 0.3V below Video (Y)
- c. Frequency H: 15.734KHz V: 60Hz (NTSC)  
Signal Level Video (Y) : Analog 0.1Vp-p/75Ω  
Video (C) : Analog 0.286p-p/75Ω  
Sync (H+V): 0.3V below Video (Y)  
Frequency H: 15.734Khz V: 60HZ (NTSC)

### F-Type TV RF connector

- a. Signal Level 60dBμV typical
- b. System NTSC
- c. Frequency 55~801MHz (NTSC)

## PC connector 15 pin male D-sub connector

- a. Pin Assignment Refer to Section 2.3.10
- b. Signal Level Video (R, G, B): Analog 0.7Vp-p/75Ω  
Sync (H, V): TTL level

RGB Signal:

- a. Sync Type TTL (Separate / Composite) or Sync. On Green
- b. Sync polarity Positive or Negative
- c. Video Amplitude RGB: 0.7Vp-p
- d. Frequency H: support to 30K~70KHz  
V: support to 50~85Hz  
Pixel Clock: support to 110MHz

---

### HDMI Signal (HDMI):

- a. Pin Assignment Refer to HDNI Pin Assignment
- b. Type A
- c. Polarity Positive or Negative
- d. Frequency

H: 15.734KHz V: 60Hz (NTSC-480i)

H: 31KHz V: 60Hz (NTSC-480p)

H: 45KHz V: 60Hz (NTSC-720p)

H: 33KHz V: 60Hz (NTSC-1080i)

### Component signal

#### Component

- a. Frequency H: 15.734KHz V: 60Hz (NTSC-480i)
  - H: 31KHz V: 60Hz (NTSC-480p)
  - H: 45KHz V: 60Hz (NTSC-720p)
  - H: 33KHz V: 60Hz (NTSC-1080i)
- b. Signal level Y: 1Vp-p Pb:  $\pm 0.350$ Vp-p Pr:  $\pm 0.350$ Vp-p
- c. Impedance 75 $\Omega$

## Chapter 6 Main Board I/o Connections

---

### J2 CONNECTION (TOP→BOTTOM)

Pin	Description
1	“LED WHITE”
2	“LED AMBER”
3	“+5V”
4	“+5V”
5	“IR”
6	“GND”
7	“GND”
8	“ADIN1”
9	“ADIN2”
10	“+3.3V”

### J1 CONNECTION (TOP→BOTTOM)

Pin	Description
1	“POWRSW”
2	“+12V”
3	“+12V”
4	“+12V”
5	“+12V”
6	“GND”
7	“GND”
8	“GND”
9	“+5V”
10	“+5V”
11	“+5V”
12	“PWM”
13	“BL ON/OFF”

# Chapter 7      Theory of Circuit Operation

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## **The operation of D-SUB 15pin route**

The D-SUB 15pin is input analog signal to the MT5372 transfer A/D converter then generates the vertical and horizontal timing signals for display device.

## **The operation of HDMII CON route**

.Then transfer to the MT5372, the MT5372 generates the vertical and horizontal timing signals for display device.

## **The operation of HDTV & Component route**

HDTV & Component signal is input to the MT5372 then MT5372 generates the vertical and horizontal timing signals for display device.

## **The operation of Video & S-Video route**

The Video and S-Video signal is transmission signal to the MT5372 then MT5372 generates the vertical and horizontal timing signals for display device.

## **The operation of TV route**

TV signal is processes to the tuner and output to MT5372 then MT5372 generates the vertical and horizontal timing signals for display device. Audio is processes to the tuner output to SIF circuit and output to MT5372. Then MT5372 process to wm8776 and output to TDA8946AJ transfer to speaker

## **The operation of DTV route**

DTV signal is processes to the tuner and transmission to MT5112 and output signal to MT5372 generates the vertical and horizontal timing signals for display device.

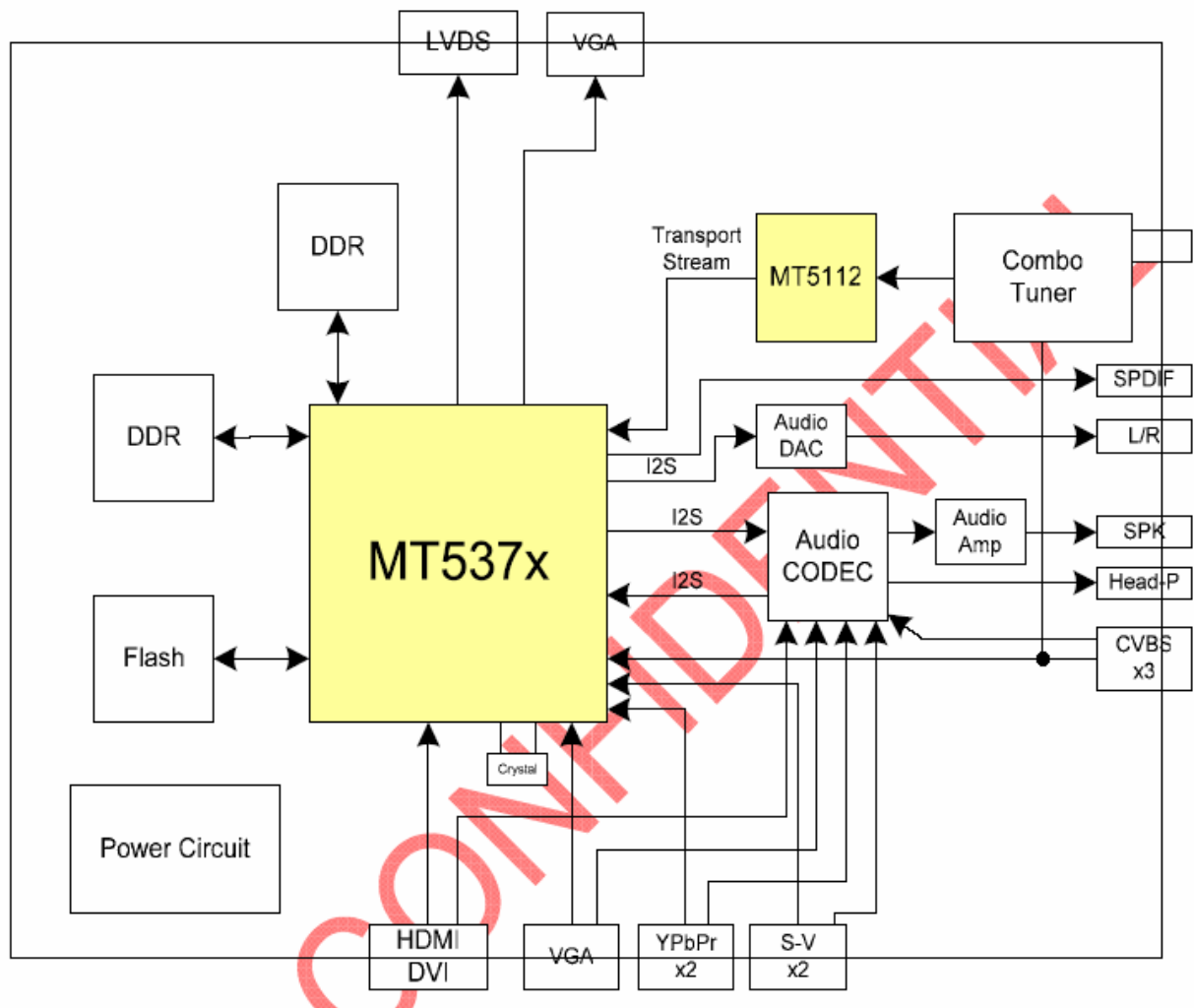
## **The operation of keypad**

There are 7 keys to control and select the function of VX32L and also has one LED to indicate the status of operation. They are "Power, ▼▲, + -, Input, OSD".

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### **MT5372 Application**

MT5372 is a highly integrated video and audio single chip processor for emerging HDTV-Ready LCD TV. It includes one 3D/2D TV Decoder recovering the best image from CVBS, and in addition, its analog input also support popular S-Video, Component, VGA video source. On-chip advanced motion adaptive de-interlacer (MDDitm) converts accordingly the interlace video into smooth non-flicking progressive motion pictures. With on-chip advanced 2D Graphic processor, MT5372 provides customers with high quality UI adding significant end product value. Flexible scalar provides wide adoption to various LCD panel for different video sources. Its on-chip audio processor decodes whole world standard audio signals from tuner with lip sync control, delivering high quality post-processed sound effect to customers. On-chip microprocessor and reference FW reduces the system BOM and shortens the schedule of UI design by high-level C program. With truly SOC design, MT5372 offers our customers the real cost-effective high performance HDTV-ready solution.





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## **1. Video input**

### **a. Input Multiplexing**

- 1.component X2
- 2.composite X2
- 3.s-videoX1
- 4.HDMI X1
- 5.VGA X1
- 6.RF&DTV X1

### **b. Input formats:**

- 1.support HDTV 480i/480p/720p/1080p
- 2.support Y/C signal 1VP-P/75Ω
- 3.support Y/C signal 1VP-P/75Ω
- 4.support 480i/408p/720p/1080i/1080p
- 5.support VGA input up to 1366x168@60HZ
- 6.support RF NTSC system Frequency 55~801MHZ;DTV 480i/480p/720p/1080p

## **2. Decoder**

### **TVD**

- 1.Single 2nd generation TV decoder
- 2.Automatic TV standard detection supporting NTSC, NTSC-4.43,
- 3.Enhanced 2nd generation NTSC Motion Adaptive 3D comb filter
- 4.Motion Adaptive 3D Noise Reduction
- 5.Embedded VBI decoder for Closed-Caption/XDS/ Teletext/WSS/VPS
- 6.Supporting Macro vision detection

### **YPbPr**

- 1.Supporting HDTV 480i/480p/576i/576p/720p/1080i input
- 2.Smart detection on Scart function for European region

### **VGA**

- 1.Supporting various VGA input timings up to SXGA (1280x1024@75Hz).
- 2.Supporting Separate/Composite/SOG sync types

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## **Digital port**

- 1.1 digital port supporting DVI 24-bit RGB or CCIR-656/601 digital video input format
- 2.1 additional 8 bit digital port for ITU656 video format

## **VBI**

1. Dual VBI decoders for the application of V-Chip/Closed-Caption/XDS/ Teletext/WSS/VPS
2. Supporting external VBI decoder by YPrPb input
3. VBI decoder up to 1000 pages Teletext.

## **3. Support Formats:**

Support NTSC, NTSC-4.43

Automatic Luma / Chroma gain control

Automatic TV standard detection

NTSC Motion Adaptive 3D comb filter

Motion adaptive 3D Noise Reduction

VBI decoder for closed-caption/XDS/Teletext/WSS/VPS

Macro vision detection

## **4. 2D-Graphic/OSD processor**

- Embedded two backend RGB domain OSD planes and one YUV domain OSD plane. to support Main/PIP Teletext/Close-caption functions together with setup menu
1. Supporting alpha blending among these two planes and video
  2. Supporting Text/Bitmap decoder
  3. Supporting line/rectangle/gradient fill
  4. Supporting bitblt
  5. Supporting color Key function
  6. Supporting Clip Mask
  7. 65535/256/16/4/2-color bitmap format OSD,
  8. Automatic vertical scrolling of OSD image
  9. Supporting OSD mirror and upside down

---

## 5. Microprocessor interface

When power is supplied and power key is pressed then the rest circuit lets Reset to low state that will reset the MT5372 to initial state. After that the Reset will transits to high state and the MT5372 start to work that microprocessor executes the programs and configures the internal registers. The execution speed of CPU is 162 MHz.

PIP/POP HARDWARE LIMITATION:

	AV1(S)	ATV	YPbPr	RGB	HDMI1	DTV
AV1/2			v	v	v	v
ATV			v	v	v	
YPbPr	v	v			v	v
RGB	v	v			v	v
HDMI1	v	v	v	v		v
DTV	v		v	v	v	

## 6. Video processor

### 1.Color Management

Fully 10-bit processing to enhance the video quality

Advanced flesh tone and multiple-color enhancement. (For skin, sky, and grass...)

Gamma/anti-Gamma correction

Advanced Color Transient Improvement (CTI)

Saturation/hue adjustment

### 2.Contrast/Brightness/Sharpness Management

Sharpness and DLTI/DCTI

Brightness and contrast adjustment

Black level extender

White peak level limiter

Adaptive Luma/Chroma management

### 3.De-interlacing

2nd generation advanced Motion adaptive de-interlacing

Automatic detect film or video source

3:2/2:2 pull down source detection

Main/PIP 2 independent de-interlacing processor

---

#### 4. Scaling

2nd generation high resolution arbitrary ratio vertical/horizontal scaling of video, from 1/32X to 32X

Advanced linear and non-linear Panorama scaling

Programmable Zoom viewer

Picture-in-Picture (PIP)

Picture-Out-Picture (POP)

#### 5. Display

Advanced dithering processing for LCD display with 6/8/10 bit output

10bit gamma correction

Supporting alpha blending for Video and two OSD planes

Frame rate conversion

#### 6. Seamless performance comparing demonstration function

Support Left/Right video processing comparing function without additional resources (DRAM...) for customers' demonstration

All the video functions (De-interlace/3D comb/NR/Flesh tone/CTI) can be included

### 7. DRAM Usage

1. For features of 5372, Dual for enhance features support, and single 8x16 DDR for simple function support Lists are the comparison chart between function support lists of (2xDDR) and (1xDDR)

	DDR*1(16MB)	DDR*2(32MB)
NR	Y	Y
3D-Comb	Y	Y
MDDi	*480i/576i	1080i
PIP	*Y	Y
POP	*Y	Y
Display	1024x768	1366x768 1280x1024 1440x900

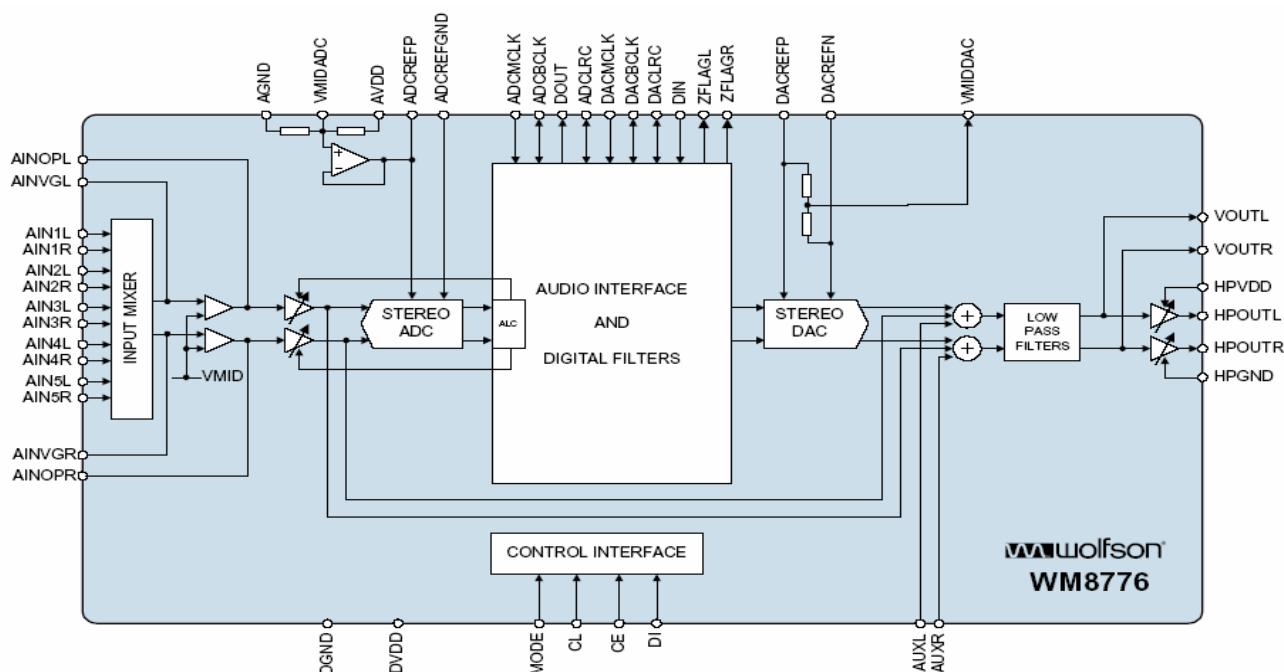
2. For single DDR, 5372 only support 1080i bob mode de-interlacing. (Non-3D de interlace)

3. With single DDR, it is suggested not to support PIP/POP features. Due to DDR Bandwidth limitation on PIP when single DDR.

## WM8776 Application

The WM8776 is a high performance, stereo audio codec with five channel input selector. The WM8776 is ideal for surround sound processing applications for home hi-fi, DVD-RW and other audiovisual equipment. Each ADC channel has programmable gain control with automatic level control. Digital audio output word lengths from 16-32 bits and sampling rates from 32kHz to 96kHz are supported. The DAC has an input mixer allowing an external analogue signal to be mixed with the DAC signal. There are also Headphone and line outputs, with control for the headphone. The WM8776 supports fully independent sample rates for the ADC and DAC. The audio data interface supports I2S, left justified, right justified and DSP formats.

## BLOCK DIAGRAM



### 1. Audio sample rate

The master clock for WM8776 supports DAC and ADC audio sampling rates 256fs to 768fs, where fs is the audio sample frequency (DACLRC or ADCLRC) typically 32kHz, 44.1kHz, 48kHz or 96kHz (the DAC also supports operation at 128fs and 192fs and 192kHz sample rate). The master clock is used to operate the digital filters and the noise shaping circuits.

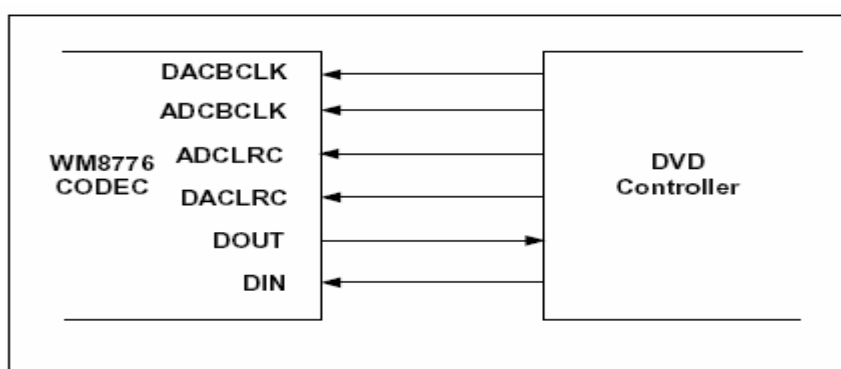
In slave mode the WM8776 has a master detection circuit that automatically determines the relationship between the master clock frequency and the sampling rate (to within +/- 32 system clocks). If there is a greater than 32 clocks error the interface is disabled and ADCLRC/DACLRC for optimal performance, although the WM8776 is tolerant of phase variations or jitter on this clock. Table shows the typical master clock frequency inputs for the WM8776

SAMPLING RATE (DACLRC/ ADCLRC)	System Clock Frequency (MHz)					
	128fs	192fs	256fs	384fs	512fs	768fs
	DAC ONLY					
32kHz	4.096	6.144	8.192	12.288	16.384	24.576
44.1kHz	5.6448	8.467	11.2896	16.9340	22.5792	33.8688
48kHz	6.144	9.216	12.288	18.432	24.576	36.864
96kHz	12.288	18.432	24.576	36.864	Unavailable	Unavailable
192kHz	24.576	36.864	Unavailable	Unavailable	Unavailable	Unavailable

## 2. DIGITAL AUDIO INTERFACE

### 1. Slave mode

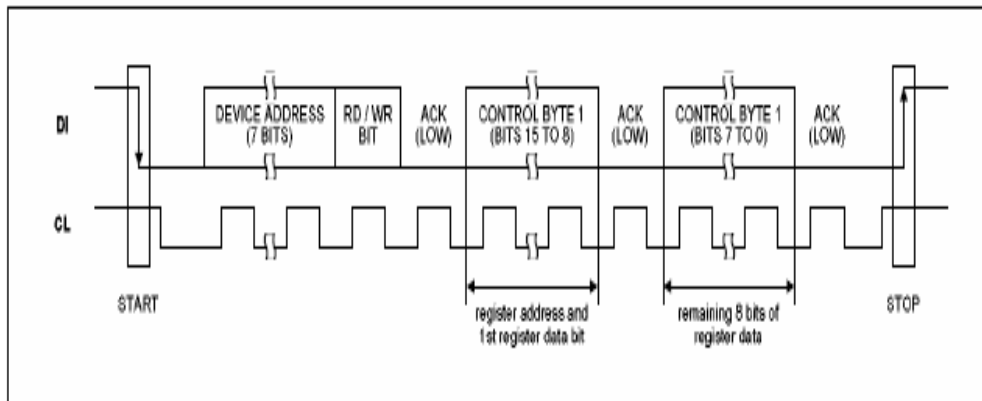
The audio interfaces operations in either slave mode selectable using the MS control bit. In slave mode DIN is always an input to the WM8776 and DOUT is always an output. The default is Slave mode. In slave mode (ms=0) ADCLRC, DACLRC, ADCBCLK, DACBCLK are input to the WM8776 DIN and DACLRC are sampled by the WM8776 on the rising edge of DACBCLK; ADCLRC is sampled on the rising edge of ADCBCLK. ADC data is output on DOUT and changes on the falling edge of ADCBCLK. By setting control bit BCLKINV the polarity of ADCBCLK and DACBCLK may be reversed so that DIN and DACLRC are sample on the falling edge of DACBCLK, ADCLRC is sampled on the falling edge of ADCBCLK and DOUT changes on the rising of ADCBCLK Slave mode as shown in the following figure.



### 2. 2 Wire serial control mode

The wm8776 supports software control via a 2-wire serial bus. Many devices can be controlled by the same bus, and each device has a unique 7-bit address (this is not the same as the 7-bit address of each register in the wm8776). The wm8776 operates as a slave device only.

2-wire serial interface as shown in the following figure.



The wm8776 has two possible device addresses, which can be selected using the CE pin  
In the VX32L LCD TV CE pin is High (device address is 36h)

CE STATE	DEVICE ADDRESS
Low	0011010 (0 x 34h)
High	0011011 (0 x 36h)

In the VX32L wm8776 has 2-wire interface

MODE	Control Mode
0	2 wire interface
1	3 wire interface

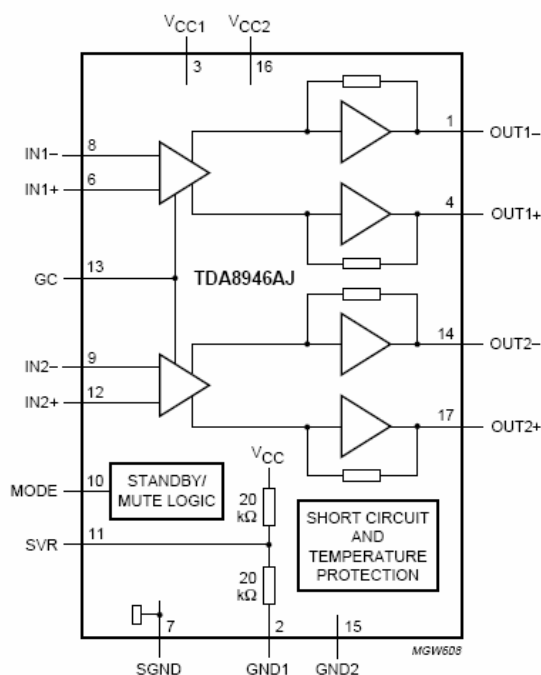
### 3. HDCP Decryption

HDCP decryption contains all necessary logic to decrypt the incoming audio and video data. The decryption process is entirely controlled by the host microprocessor through a set sequence of register reads and wires through the DDC channel. Pre-programmed HDCP keys and key Selection Vector are used in the decryption process. A resulting calculated to an XOR mask during each clock cycle to decrypt the audio/video data in sync with the host.

## TDA8946 Application

In VX32L TV the TDA8946AJ is a dual-channel audio power amplifier with DC gain control. It has an output power of 2 . 10 W at an 8 . load and a 12 V supply.

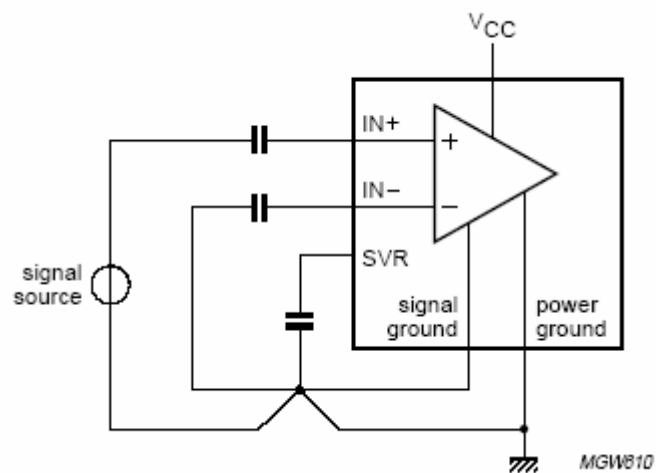
### Block diagram



### 1. Input configuration

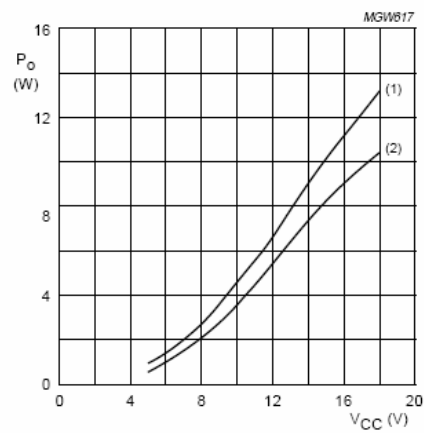
The TDA8946AJ inputs can be driven symmetrical (floating) as well as asymmetrical. In the asymmetrical mode one input pin is connected via a capacitor to the signal source and the other input is connected to the signal ground. The signal ground should be as close as possible to the SVR (electrolytic) capacitor ground. Note that the DC level of the input pins is half of the supply voltage VCC, so coupling capacitors for both pins are necessary





## 2. Output power measurement

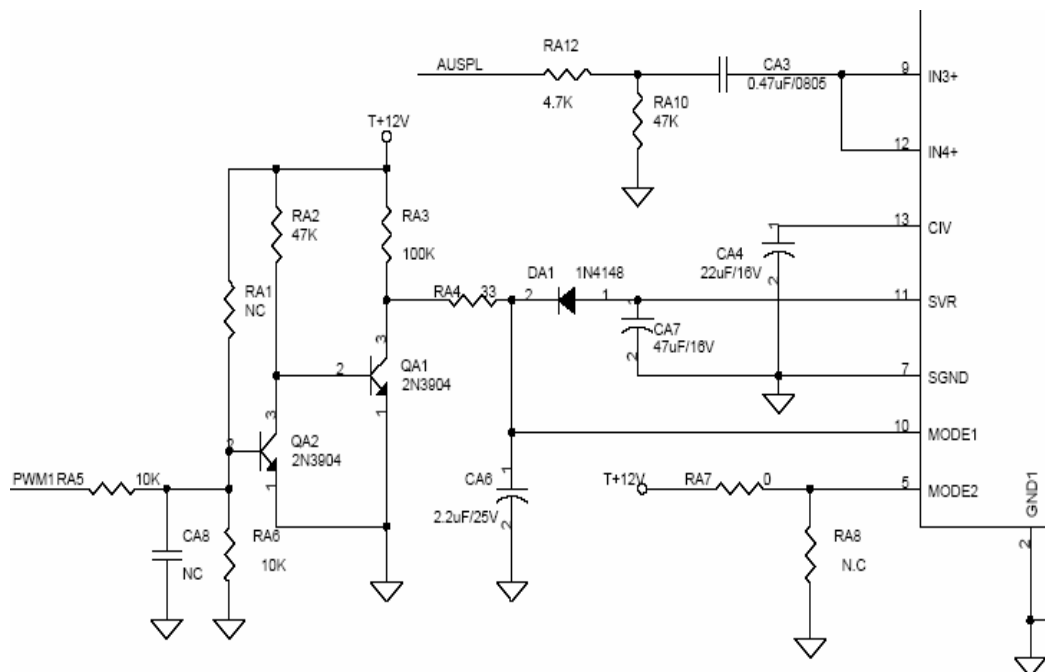
The output power as a function of the supply voltage is measured on the output pins at THD = 10%, in the VX32L LCD TV  $V_{CC}=12V$  so we can see as shown in the following figure output about 7W.



$R_L = 8 \Omega$

(1) THD = 10%

(2) THD = 1%



### 3. Mode selection

In the VX32L LCD TV TDA8946AJ has two functional modes, which can be selected by applying the proper DC voltage to pin MODE.

1. Mute — In this mode the amplifier is DC-biased but not operational (no audio output).

This allows the input coupling capacitors to be charged to avoid pop-noise. The device is in mute mode when  $3.5\text{ V} < V_{\text{MODE}} < (V_{\text{CC}} - 1.5\text{ V})$ .

2. Operating — In this mode the amplifier is operating normally. The operating mode is activated at  $V_{\text{MODE}} < 1.0\text{V}$ .

### General Feature List :

#### 1 . Host CPU:

1. ARM 926EJ
2. 16K I-Cache and 16K D-Cache
3. 8K Data TCM and 8K instruction
4. JTAG ICE interface
5. Watch Dog timers

---

## 2 . Transport Demuxer :

1. Support 3 independent transport stream inputs
2. Support serial/parallel interface for each transport stream input
3. Support ATSC , DVB , and MPEG2 transport stream inputs.
4. Programmable sync detection.
5. Support DES/3-DES De-scramble.
6. 96 PID filter and 128 section filters.
7. Support TS recording via IEEE1394 interface.

## 3 . MPEG2 Decoder :

1. Support dual MPEG-2 HD decoder or up to 8 SD decoder.
2. Complaint to [MP@ML](#) , [MP@HL](#) and MPEG-1 video standards.

## 4 . JPEG Decoder :

1. Decode Base-line or progressive JPEG file.

## 5 . 2D Graphics :

1. Support multiple color modes.
2. Point , horizontal/vertical line primitive drawing.
3. Rectangle fill and gradient fill functions.
4. Bitblt with transparent , alpha blending , alpha composition and stretch.
5. Font rendering by color expansion.
6. Support clip masks.
7. YCrCb to RGB color space transfer.

## 6 . OSD Display :

1. 3 linking list OSDs with multiple color mode.
2. OSD scaling with arbitrary ratio from 1/2x to 2x.
3. Square size , 32x32 or 64x64 pixel , hardware cursor.

## 7 . Video Processing :

1. Advanced Motion adaptive de-interlace on SDTV resolution.
2. Support clip
3. 3:2/2:2 pull down source detection.
4. Arbitrary ratio vertical/horizontal scaling of video , from 1/15X to 16X.
5. Support Edge preserve.
6. Support horizontal edge enhancement.
7. Support Quad-Picture.

---

8 . Main Display :

1. Mixing two video and three OSD and hardware cursor.
2. Contrast/Brightness adjustment.
3. Gamma correction.
4. Picture-in-Picture( PIP ).
5. Picture-Out-Picture( POP ).
6. 480i/576i/480p/576p/720p/1080i output

9 . Auxiliary Display :

1. Mixing one video and one OSD.
2. 480i/576i output.

10 . TV Encoder :

1. Support NTSC M/N , PAL M/N/B/D/G/H/I
2. Macrovision Rev 7.1.L1
3. CGMS/WSS.
4. Closed Captioning.
5. Six 12-bit video DACs for CVBS , S-video or RGB/YPbPr output.

11 . Digital Video Interface :

1. Support SAV/EAV.
2. Support 8/16 for SD/HD digital video input.
3. Support 8/16/24 bits digital output for main display.
4. Support 8 bits digital output for aux display.

12 . DRAM Controller :

1. Support 64Mb to 1Gb DDR DRAM devices.
2. Configurable 32/64 bit data bus interface.
3. Support DDR266 , DDR333 , DDR400 , JEDEC specification compliant SDRAM.

13 . Peripheral Bus Interface :

1. Support NOR/NAND flash.
2. Support CableCard host control bus.

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14 . Audio :

1. Support Dolby Digital AC-3 decoding.
2. MPEG-1 layer I/II , MP3 decoding.
3. Dolby prologic II.
4. Main audio output : 5.1ch + 2ch ( down mix )
5. Auxiliary audio output : 2ch.
6. Pink noise and white noise generator.
7. Equalizer.
8. Bass management.
9. 3D surround processing include virtual surround.
10. Audio and video lip synchronization.
11. Support reverberation.
12. SPDIF out.
13. I2S I/F.

15 . Peripherals :

1. Three UARTs with Tx and Rx FIFO , two of them have hardware flow control.
2. Two serial interfaces , one is master only the other can be set to master mode or slave mode.
3. Two PWMs.
4. IR blaster and receiver.
5. IEEE1394 link controller.
6. IDE bus : ATA/ATAPI7 UDMA mode 5 , 100MB/s.
7. Real-time clock and watchdog controller.
8. Memory card I/F : MS/MS-pro ,SD ,CF ,and MMC
9. PCMCIA/POD/CI interface

16 . IC Outline :

1. 471 Pin BGA Package.
2. 3.3V/1.2V dual Voltage.

## MX29LV320BTTC (Flash) Application :

The MX29LV320AT/B is a 32-mega bit Flash memory organized as 4M bytes of 8 bits and 2M words of 16 bits. MXIC's Flash memories offer the most cost-effective and reliable read/write non-volatile random access memory.

The MX29LV320AT/B is packaged in 48-pin TSOP and 48-ball CSP. It is designed to be reprogrammed and erased in system or in standard EPROM programmers. The standard MX29LV320AT/B offers access time as fast as 70ns, allowing operation of high-speed microprocessors without wait states. To eliminate bus contention, the MX29LV320AT/B has separate chip enable (CE) and output enable (OE) controls.

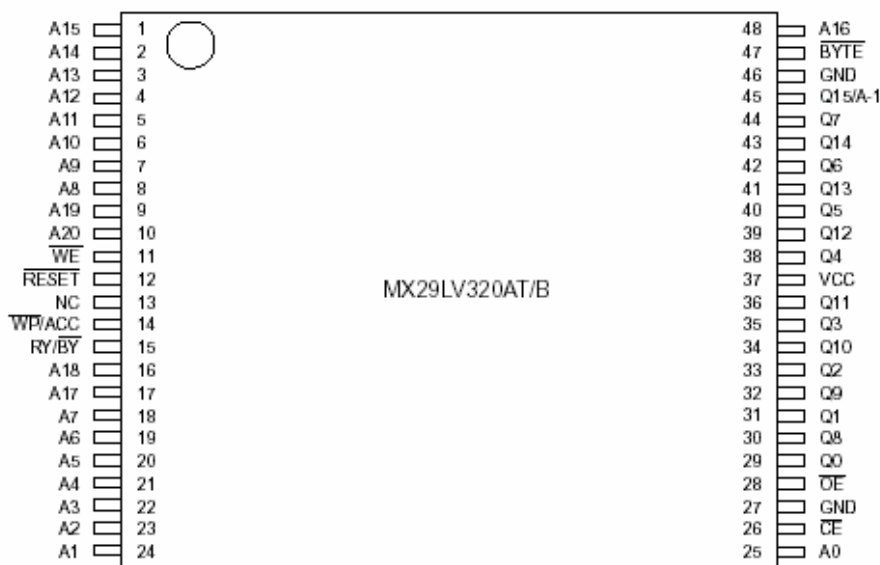
MXIC's Flash memories augment EPROM functionality with in-circuit electrical erasure and programming. The MX29LV320AT/B uses a command register to manage this functionality. MXIC Flash technology reliably stores memory contents even after 100,000 erase and program cycles. The MXIC cell is designed to optimize the erase and program mechanisms. In addition, the combination of advanced tunnel oxide processing and low internal electric fields for erase and programming operations produces reliable cycling.

The MX29LV320AT/B uses a 2.7V to 3.6V VCC supply to perform the High Reliability Erase and auto Program/Erase algorithms.

The highest degree of latch-up protection is achieved with MXIC's proprietary non-epi process. Latch-up protection is proved for stresses up to 100 milliamperes on address and data pin from -1V to VCC + 1V.

## PIN CONFIGURATION

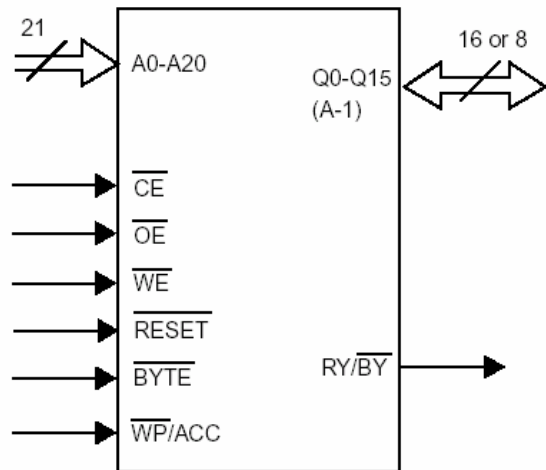
### 48 TSOP



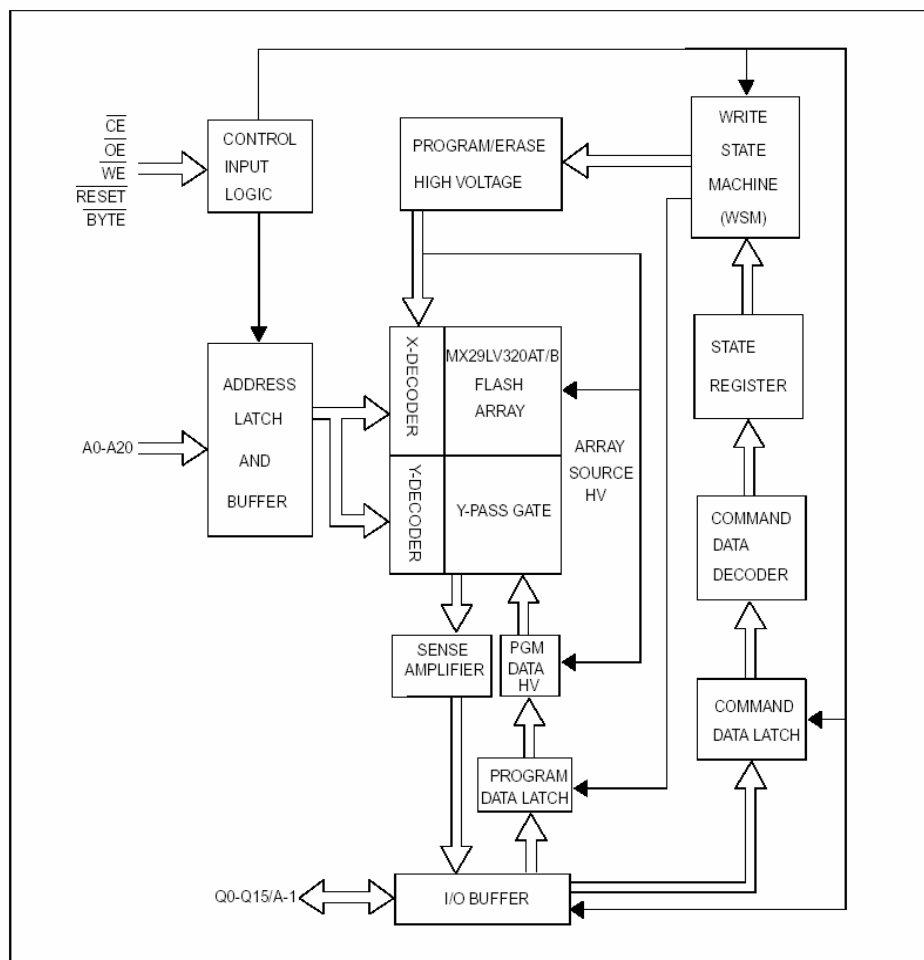
## PIN DESCRIPTION

SYMBOL	PIN NAME
A0~A20	Address Input
Q0~Q14	15 Data Inputs/Outputs
Q15/A-1	Q15(Data Input/Output, word mode) A-1(LSB Address Input, byte mode)
$\overline{CE}$	Chip Enable Input
$\overline{WE}$	Write Enable Input
$\overline{OE}$	Output Enable Input
BYTE	Word/Byte Selection Input
RESET	Hardware Reset Pin, Active Low
RY/BY	Read/Busy Output
VCC	3.0 volt-only single power supply
WP/ACC	Hardware Write Protect/Acceleration Pin
GND	Device Ground
NC	Pin Not Connected Internally

## LOGIC SYMBOL



## BLOCK DIAGRAM



## BUS OPERATION--1

Operation	CE	OE	WE	RESET	WP/ACC	Addresses (Note 2)	Q0~Q7	Q8 ~ Q15	
								Byte=VIH	Byte=VIL
Read	L	L	H	H	L/H	A <sub>IN</sub>	D <sub>OUT</sub>	D <sub>OUT</sub>	Q8-A14 =High-Z Q15=A-1
Write (Note 1)	L	H	L	H	Note 3	A <sub>IN</sub>	D <sub>IN</sub>	D <sub>IN</sub>	
Accelerate Program	L	H	L	H	V <sub>HH</sub>	A <sub>IN</sub>	D <sub>IN</sub>	D <sub>IN</sub>	
Standby	VCC ± 0.3V	X	X	VCC ± 0.3V	H	X	High-Z	High-Z	High-Z
Output Disable	L	H	H	H	L/H	X	High-Z	High-Z	High-Z
Reset	X	X	X	L	L/H	X	High-Z	High-Z	High-Z
Sector Group Protect (Note 2)	L	H	L	V <sub>ID</sub>	L/H	Sector Addresses, A6=L, A1=H, A0=L	D <sub>IN</sub> , D <sub>OUT</sub>	X	X
Chip Unprotect (Note 2)	L	H	L	V <sub>ID</sub>	Note 3	Sector Addresses, A6=H, A1=H, A0=L	D <sub>IN</sub> , D <sub>OUT</sub>	X	X
Temporary Sector Group Unprotect	X	X	X	V <sub>ID</sub>	Note 3	A <sub>IN</sub>	D <sub>IN</sub>	D <sub>IN</sub>	High-Z

### Legend:

L=Logic LOW=VIL, H=Logic High=VIH, VID=12.0 0.5V, VHH=11.5-12.5V, X=Don't Care, AIN=Address IN, DIN=Data IN, DOUT=Data OUT

### Notes:

1. When the WP/ACC pin is at VHH, the device enters the accelerated program mode. See "Accelerated Program Operations" for more information.
2. The sector group protect and chip unprotect functions may also be implemented via programming equipment. See the "Sector Group Protection and Chip Unprotection" section.
3. If WP/ACC=VIL, the two outermost boot sectors remain protected. If WP/ACC=VIH, the two outermost boot sector protection depends on whether they were last protected or unprotected using the method described in "Sector/Sector Block Protection and Unprotection". If WP/ACC=VHH, all sectors will be unprotected.
4. DIN or Dout as required by command sequence, data polling, or sector protection algorithm.
5. Address are A20:A0 in word mode (BYTE=VIH), A20:A-1 in byte mode (BYTE=VIL).



## BUS OPERATION--2

Operation	$\overline{CE}$	$\overline{OE}$	$\overline{WE}$	A20 to A12	A11 to A10	A9	A8 to A7	A6	A5 to A2	A1	A0	Q0-Q7	Q8-Q15
Read Silicon ID Manufacturer Code	L	L	H	X	X	V <sub>ID</sub>	X	L	X	L	L	C2H	X
Read Silicon ID MX29LV320AT	L	L	H	X	X	V <sub>ID</sub>	X	L	X	L	H	A7H	22h(word) X (byte)
Read Silicon ID MX29LV320AB	L	L	H	X	X	V <sub>ID</sub>	X	L	X	L	H	A8H	22h(word) X (byte)
Sector Protect Verification	L	L	H	SA	X	V <sub>ID</sub>	X	L	X	H	L	01h(1), or 00h	X
Security Sector Indicator Bit (Q7)	L	L	H	X	X	V <sub>ID</sub>	X	L	X	H	H	99h(2), or 19h	X

Notes:

- 1.Code=00h means unprotected, or code=01h protected.
- 2.Code=99 means factory locked, or code=19h not factory locked.

## WRITE COMMANDS/COMMAND SEQUENCES

To program data to the device or erase sectors of memory , the system must drive WE and CE to VIL, and OE to VIH.An erase operation can erase one sector, multiple sectors , or the entire device. A "sector address" consists of the address bits required to uniquely select a sector. Writing specific address and data commands or sequences into the command register initiates device operations. Table A defines the valid register command sequences. Writing incorrect address and data values or writing them in the improper sequence resets the device to reading array data. Section has details on erasing a sector or the entire chip, or suspending/resuming the erase operation.

After the system writes the Automatic Select command sequence, the device enters the Automatic Select mode. The system can then read Automatic Select codes from the internal register (which is separate from the memory array) on Q7-Q0. Standard read cycle timings apply in this mode. Refer to the Automatic Select Mode and Automatic Select Command Sequence section for more information.ICC2 in the DC Characteristics table represents the active current specification for the write mode. The "AC Characteristics" section contains timing specification table and timing diagrams for write operations.

**TABLE A. MX29LV320AT/B COMMAND DEFINITIONS**

Command		Bus Cycles	First Bus Cycle		Second Bus Cycle		Third Bus Cycle		Fourth Bus Cycle		Fifth Bus Cycle		Sixth Bus Cycle	
			Addr	Data	Addr	Data	Addr	Data	Addr	Data	Addr	Data	Addr	Data
Read(Note 5)		1	RA	RD										
Reset(Note 4)		1	XXX	F0										
Automatic Select(Note 5)														
Manufacturer ID	Word	4	555	AA	2AA	55	555	90	X00	C2H				
	Byte	4	AAA	AA	555	55	AAA	90	X00	C2H				
Device ID	Word	4	555	AA	2AA	55	555	90	X01	ID				
	Byte	4	AAA	AA	555	55	AAA	90	X02					
Security Sector Factory Protect Verify (Note 6)	Word	4	555	AA	2AA	55	555	90	X03	99/19				
	Byte	4	AAA	AA	555	55	AAA	90	X06					
Sector Protect Verify (Note 7)	Word	4	555	AA	2AA	55	555	90	(SA)X02	00/01				
	Byte	4	AAA	AA	555	55	AAA	90	(SA)X04					
Enter Security Sector Region	Word	3	555	AA	2AA	55	555	88						
	Byte	3	AAA	AA	555	55	AAA	88						
Exit Security Sector	Word	4	555	AA	2AA	55	555	90	XXX	00				
	Byte	4	AAA	AA	555	55	AAA	90	XXX	00				
Program	Word	4	555	AA	2AA	55	555	A0	PA	PD				
	Byte	4	AAA	AA	555	55	AAA	A0	PA	PD				
Chip Erase	Word	6	555	AA	2AA	55	555	80	555	AA	2AA	55	555	10
	Byte	6	AAA	AA	555	55	AAA	80	AAA	AA	555	55	AAA	10
Sector Erase	Word	6	555	AA	2AA	55	555	80	555	AA	2AA	55	SA	30
	Byte	6	AAA	AA	555	55	AAA	80	AAA	AA	555	55	SA	30
CFI Query (Note 8)	Word	1	55	98										
	Byte	1	AA	98										
Erase Suspend(Note 9)		1	SA	B0										
Erase Resume(Note 10)		1	SA	30										

**Legend:**

X=Don't care

RA=Address of the memory location to be read.

RD=Data read from location RA during read operation.

PA=Address of the memory location to be programmed.

Addresses are latched on the falling edge of the WE or CE pulse.

PD=Data to be programmed at location PA. Data is latched on the rising edge of WE or CE pulse.

SA=Address of the sector to be erased or verified. Address bits A20-A12 uniquely select any sector.

ID=22A7h(Top), 22A8h(Bottom)

**Notes:**

- 1.All values are in hexadecimal.
- 2.Except when reading array or Automatic Select data, all bus cycles are write operation.
- 3.The Reset command is required to return to the read mode when the device is in the Automatic Select mode or if Q5 goes high.
- 4.The fourth cycle of the Automatic Select command sequence is a read cycle.
- 5.The data is 99h for factory locked and 19h for not factory locked.
- 6.The data is 00h for an unprotected sector/sector block and 01h for a protected sector/sector block. In the third cycle of the command sequence, address bit A20=0 to verify sectors 0~31, A20=1 to verify sectors 32~70 for Top Boot device.
- 7.Command is valid when device is ready to read array data or when device is in Automatic Select mode.
- 8.The system may read and program functions in non-erasing sectors, or enter the Automatic Select mode, when in the erase Suspend mode. The Erase Suspend command is valid only during a sector erase operation.
- 9.The Erase Resume command is valid only during the Erase Suspend mode.

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## STANDBY MODE

MX29LV320AT/B can be set into Standby mode with two different approaches. One is using both CE and RESET pins and the other one is using RESET pin only.

When using both pins of CE and RESET, a CMOS Standby mode is achieved with both pins held at  $V_{CC} \pm 0.3V$ . Under this condition, the current consumed is less than 0.2uA (typ.). If both of the CE and RESET are held at  $V_{IH}$ , but not within the range of  $V_{CC} \pm 0.3V$ , the device will still be in the standby mode, but the standby current will be larger. During Auto Algorithm operation,  $V_{CC}$  active current ( $ICC2$ ) is required even  $CE = "H"$  until the operation is completed. The device can be read with standard access time ( $t_{CE}$ ) from either of these standby modes.

When using only RESET, a CMOS standby mode is achieved with RESET input held at  $V_{SS} \pm 0.3V$ . Under this condition the current is consumed less than 1uA (typ.). Once the RESET pin is taken high, the device is back to active without recovery delay. In the standby mode the outputs are in the high impedance state, independent of the OE input. MX29LV320AT/B is capable to provide the Automatic Standby Mode to restrain power consumption during readout of data. This mode can be used effectively with an application requested low power consumption such as handy terminals.

To active this mode, MX29LV320AT/B automatically switch themselves to low power mode when MX29LV320AT/B addresses remain stable during access time of  $t_{ACC} + 30ns$ . It is not necessary to control CE, WE, and OE on the mode. Under the mode, the current consumed is typically 0.2uA (CMOS level).

## RESET OPERATION

The RESET pin provides a hardware method of resetting the device to reading array data. When the RESET pin is driven low for at least a period of  $t_{RP}$ , the device immediately terminates any operation in progress, tristates all output pins, and ignores all read/write commands for the duration of the RESET pulse. The device also resets the internal state machine to reading array data. The operation that was interrupted should be reinitiated once the device is ready to accept another command sequence, to ensure data integrity.

Current is reduced for the duration of the RESET pulse. When RESET is held at  $V_{SS} \pm 0.3V$ , the device draws CMOS standby current ( $ICC4$ ). If RESET is held at  $V_{IL}$  but not within  $V_{SS} \pm 0.3V$ , the standby current will be greater. The RESET pin may be tied to system reset circuitry. A system reset would that also reset the Flash memory, enabling the system to read the boot-up firm-ware from the Flash memory.

---

If RESET is asserted during a program or erase operation, the RY/BY pin remains a "0" (busy) until the internal reset operation is complete, which requires a time of tREADY (during Embedded Algorithms). The system can thus monitor RY/BY to determine whether the reset operation is complete. If RESET is asserted when a program or erase operation is not executing (RY/BY pin is "1"), the reset operation is completed within a time of tREADY (not during Embedded Algorithms). The system can read data tRH after the RESET pin returns to VIH. Refer to the AC Characteristics tables for RESET parameters and to Figure 14 for the timing diagram.

## **WRITE PROTECT (WP)**

The write protect function provides a hardware method to protect boot sectors without using VID.

If the system asserts VIL on the WP/ACC pin, the device disables program and erase functions in the two "outermost" 8 Kbyte boot sectors independently of whether those sectors were protected or unprotected using the method described in "Sector/Sector Group Protection and Chip Unprotection". The two outermost 8 Kbyte boot sectors are the two sectors containing the lowest addresses in a bottom-boot-configured device, or the two sectors containing the highest addresses in a top-boot-configured device.

If the system asserts VIH on the WP/ACC pin, the device reverts to whether the two outermost 8K Byte boot sectors were last set to be protected or unprotected. That is, sector protection or unprotection for these two sectors depends on whether they were last protected or unprotected using the method described in "Sector/Sector Group Protection and Chip Unprotection".

Note that the WP/ACC pin must not be left floating or unconnected; inconsistent behavior of the device may result.

## **SOFTWARE COMMAND DEFINITIONS :**

Device operations are selected by writing specific address and data sequences into the command register. Writing incorrect address and data values or writing them in the improper sequence will reset the device to the read mode. Table 3 defines the valid register command sequences. Note that the Erase Suspend (B0H) and Erase Resume (30H) commands are valid only while the Sector Erase operation is in progress. Either of the two reset command sequences will reset the device (when applicable).

All addresses are latched on the falling edge of WE or CE, whichever happens later. All data are latched on rising edge of WE or CE, whichever happens first.

## WRITE OPERATION STATUS

The device provides several bits to determine the status of a write operation: Q2, Q3, Q5, Q6, Q7, and RY/BY. Table B and the following subsections describe the functions of these bits. Q7, RY/BY, and Q6 each offer a method for determining whether a program or erase operation is complete or in progress. These three bits are discussed first.

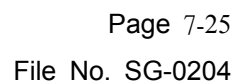
**Table B. Write Operation Status**

	Status		Q7 Note1	Q6	Q5 Note2	Q3	Q2	RY/BY
In Progress	Byte/Word Program in Auto Program Algorithm		$\overline{Q7}$	Toggle	0	N/A	No Toggle	0
	Auto Erase Algorithm		0	Toggle	0	1	Toggle	0
	Erase Suspended Mode	Erase Suspend Read (Erase Suspended Sector)	1	No Toggle	0	N/A	Toggle	1
		Erase Suspend Read (Non-Erase Suspended Sector)	Data	Data	Data	Data	Data	1
		Erase Suspend Program	$\overline{Q7}$	Toggle	0	N/A	N/A	0
Exceeded Time Limits	Byte/Word Program in Auto Program Algorithm		$\overline{Q7}$	Toggle	1	N/A	No Toggle	0
	Auto Erase Algorithm		0	Toggle	1	1	Toggle	0
	Erase Suspend Program		$\overline{Q7}$	Toggle	1	N/A	N/A	0

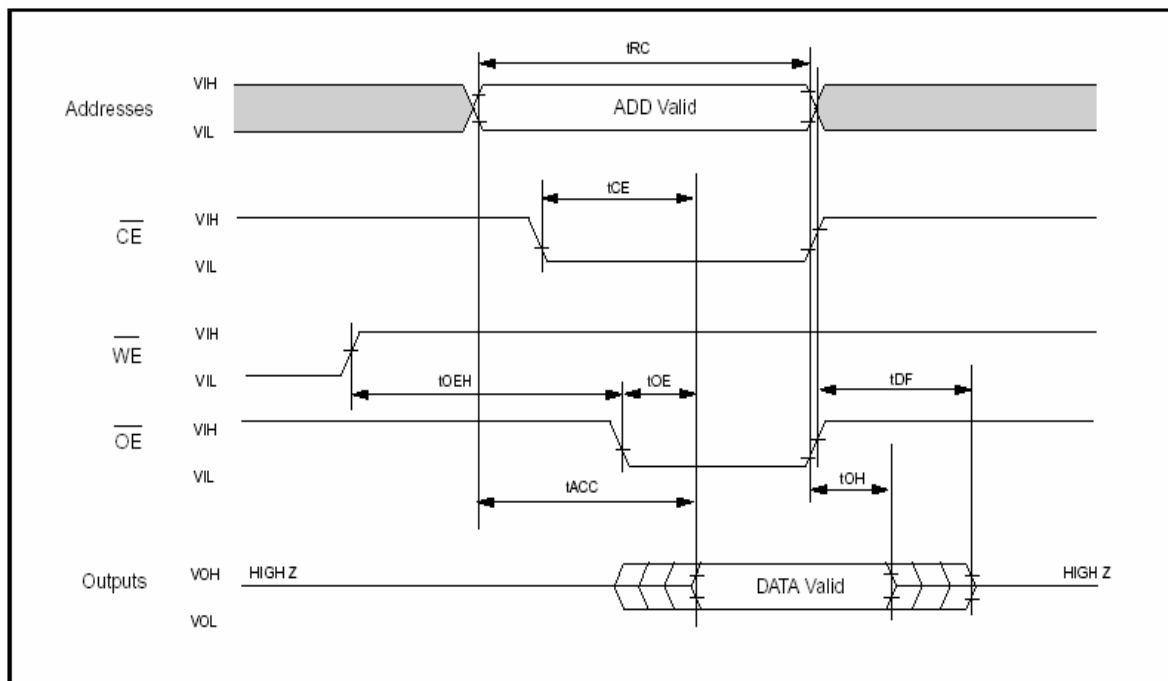
### Notes:

1. Performing successive read operations from the erase-suspended sector will cause Q2 to toggle.
2. Performing successive read operations from any address will cause Q6 to toggle.
3. Reading the byte/word address being programmed while in the erase-suspend program mode will indicate logic "1" at the Q2 bit.  
However, successive reads from the erase-suspended sector will cause Q2 to toggle.

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File No. SG-0204

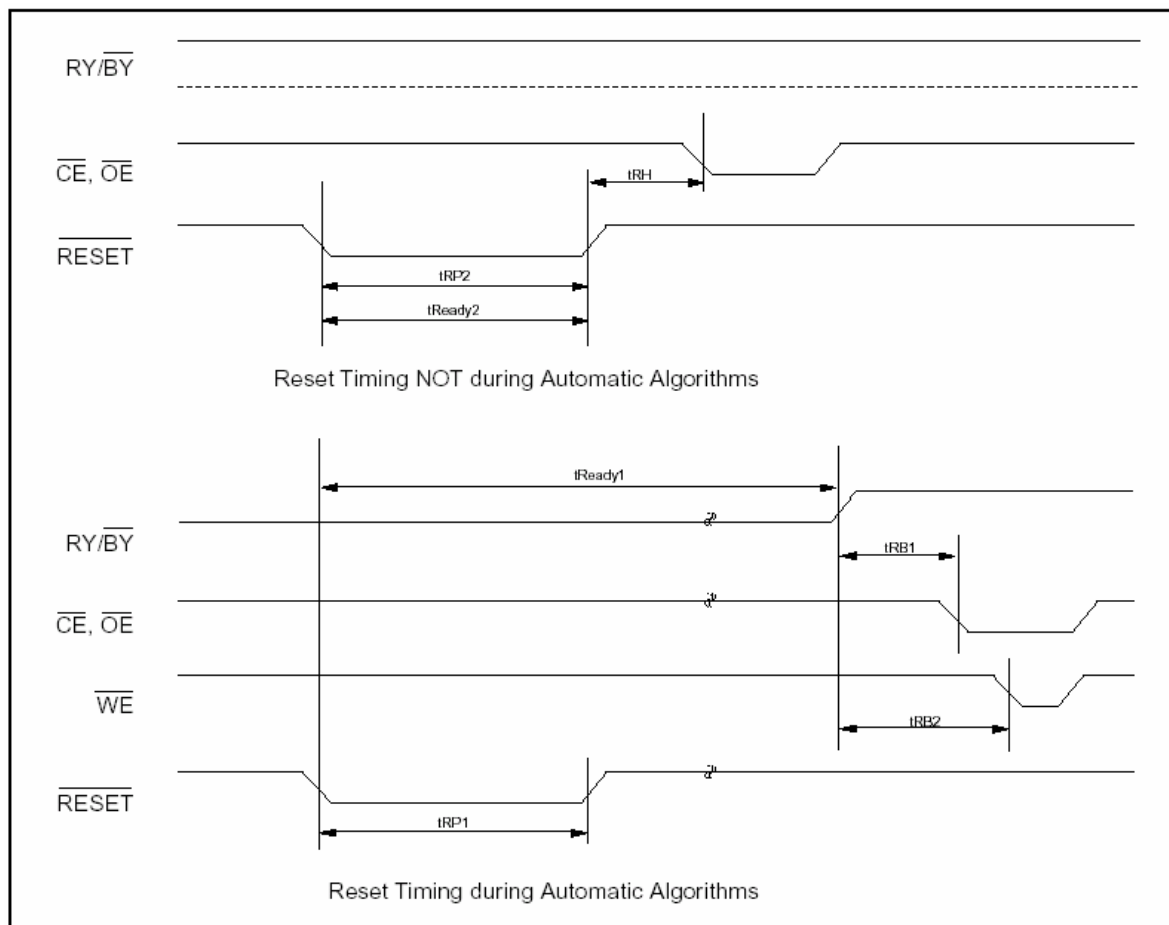


## AC CHARACTERISTICS

Parameter	Description	Test Setup	All Speed Options	Unit
tREADY1	RESET PIN Low (During Automatic Algorithms) to Read or Write (See Note)	MAX	20	us
tREADY2	RESET PIN Low (NOT During Automatic Algorithms) to Read or Write (See Note)	MAX	500	ns
tRP1	RESET Pulse Width (During Automatic Algorithms)	MIN	10	us
tRP2	RESET Pulse Width (NOT During Automatic Algorithms)	MIN	500	ns
tRH	RESET High Time Before Read(See Note)	MIN	70	ns
tRB1	RY/ $\overline{\text{BY}}$ Recovery Time(to $\overline{\text{CE}}$ , $\overline{\text{OE}}$ go low)	MIN	0	ns
tRB2	RY/ $\overline{\text{BY}}$ Recovery Time(to $\overline{\text{WE}}$ go low)	MIN	50	ns

Note:Not 100% tested

**Fig E. RESET TIMING WAVEFORM**

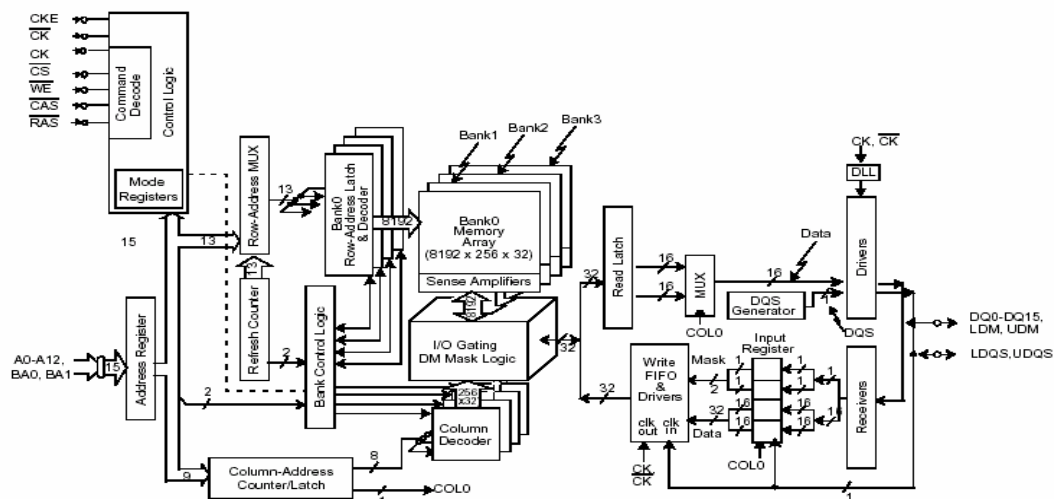


## DDR SDRAM (NT5DS16M16CS-5T) Application:

### Functional Description

The 256Mb DDR SDRAM is a high-speed CMOS, dynamic random-access memory containing 268, 435, 456 bits. The 256Mb DDR SDRAM is internally configured as a quad-bank DRAM. The 256Mb DDR SDRAM uses a double-data-rate architecture to achieve high-speed operation. The double-data-rate architecture is essentially a  $2n$  prefetch architecture, with an interface designed to transfer two data words per clock cycle at the I/O pins. A single read or write access for the 256Mb DDR SDRAM consists of a single  $2n$ -bit wide, one clock cycle data transfer at the internal DRAM core and two corresponding  $n$ -bit wide, one-half clock cycle data transfers at the I/O pins. Read and write accesses to the DDR SDRAM are burst oriented; accesses start at a selected location and continue for a programmed number of locations in a programmed sequence. Accesses begin with the registration of an Active command, which is then followed by a Read or Write command. The address bits registered coincident with the Active command are used to select the bank and row to be accessed (BA0, BA1 select the bank; A0-A12 select the row). The address bits registered coincident with the Read or Write command are used to select the starting column location for the burst access. Prior to normal operation, the DDR SDRAM must be initialized. The following sections provide detailed information covering device initialization, register definition, command descriptions and device operation.

### Block Diagram (16Mb x 16)



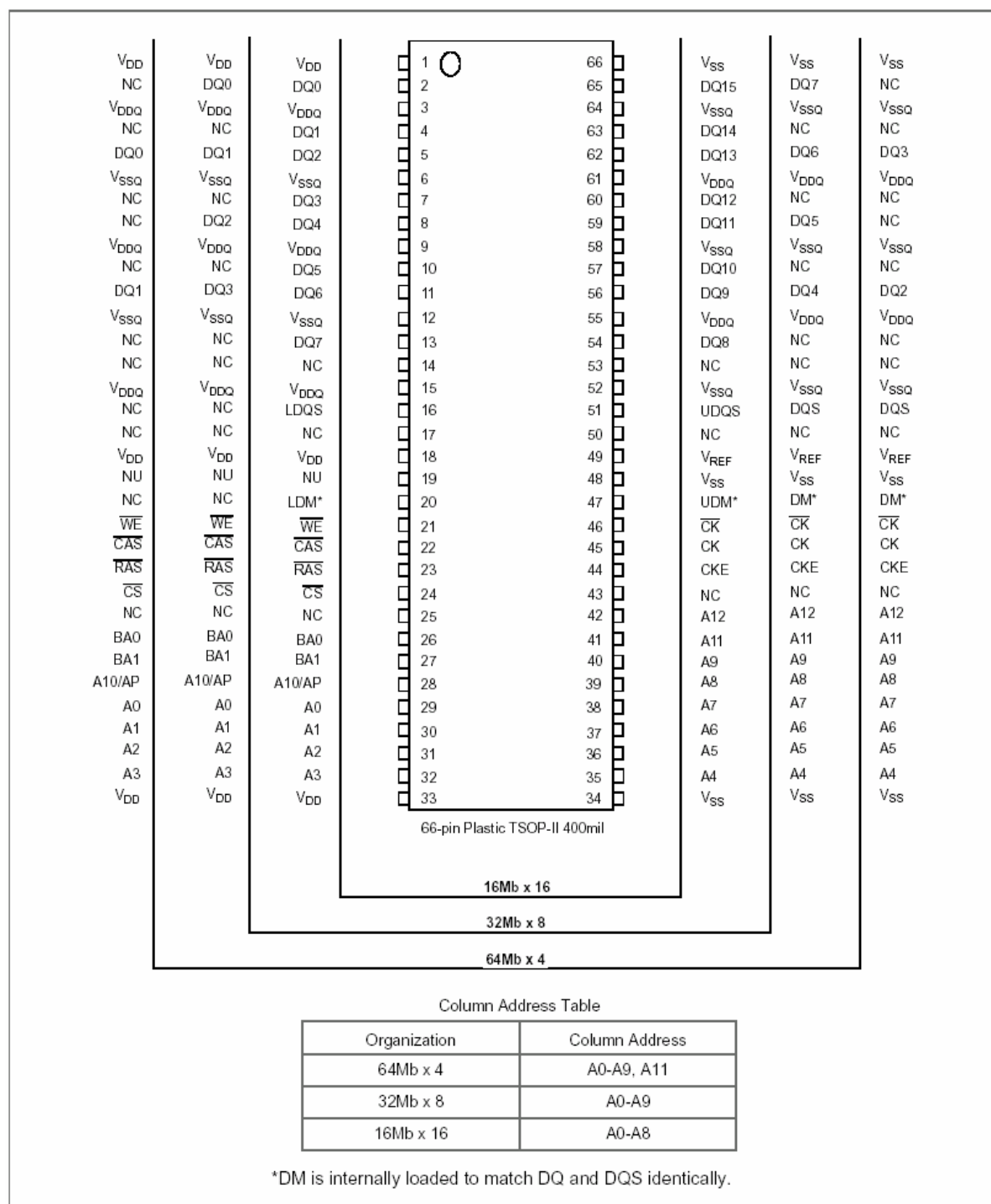
**Note:** This Functional Block Diagram is intended to facilitate user understanding of the operation of the device; it does not represent an actual circuit implementation.

**Note:** DM is a unidirectional signal (input only), but is internally loaded to match the load of the bidirectional DQ and DQS signals.

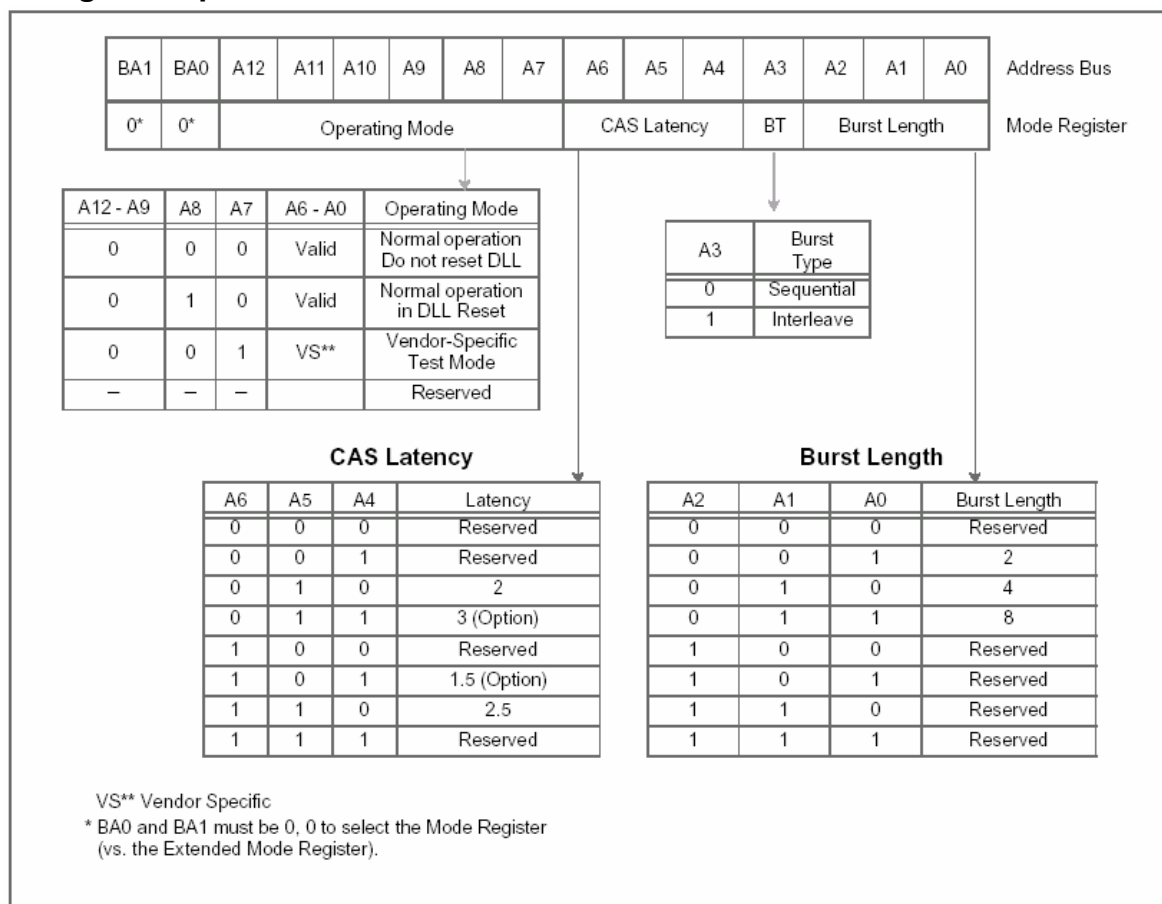
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## Pin Configuration - 400mil TSOP II (x4 / x8 / x16)



## Mode Register Operation



## Operating Mode

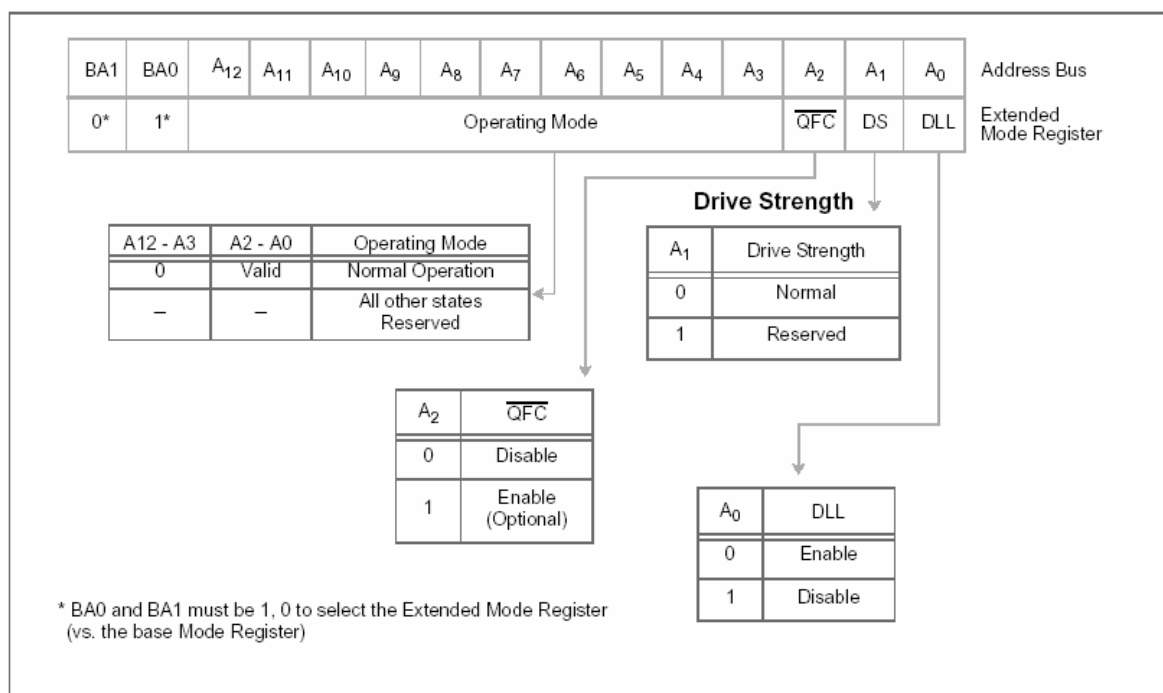
The normal operating mode is selected by issuing a Mode Register Set Command with bits A7-A12 to zero, and bits A0-A6 set to the desired values. A DLL reset is initiated by issuing a Mode Register Set command with bits A7 and A9-A12 each set to zero, bit A8 set to one, and bits A0-A6 set to the desired values. A Mode Register Set command issued to reset the DLL should always be followed by a Mode Register Set command to select normal operating mode.

All other combinations of values for A7-A12 are reserved for future use and/or test modes. Test modes and reserved states should not be used as unknown operation or incompatibility with future versions may result.

## Extended Mode Register

The Extended Mode Register controls functions beyond those controlled by the Mode Register; these additional functions include DLL enable/disable, bit A0; output drive strength selection, bit A1; and QFC output enable/disable, bit A2 (NTC optional). These functions are controlled via the bit settings shown in the Extended Mode Register Definition. The Extended Mode Register is programmed via the Mode Register Set command (with BA0 = 1 and BA1 = 0) and retains the stored information until it is programmed again or the device loses power. The Extended Mode Register must be loaded when all banks are idle, and the controller must wait the specified time before initiating any subsequent operation. Violating either of these requirements result in unspecified operation.

## Extended Mode Register Definition



## Truth Table a: Commands

Name (Function)	$\overline{CS}$	$\overline{RAS}$	$\overline{CAS}$	$\overline{WE}$	Address	MNE	Notes
Deselect (Nop)	H	X	X	X	X	NOP	1, 9
No Operation (Nop)	L	H	H	H	X	NOP	1, 9
Active (Select Bank And Activate Row)	L	L	H	H	Bank/Row	ACT	1, 3
Read (Select Bank And Column, And Start Read Burst)	L	H	L	H	Bank/Col	Read	1, 4
Write (Select Bank And Column, And Start Write Burst)	L	H	L	L	Bank/Col	Write	1, 4
Burst Terminate	L	H	H	L	X	BST	1, 8
Precharge (Deactivate Row In Bank Or Banks)	L	L	H	L	Code	PRE	1, 5
Auto Refresh Or Self Refresh (Enter Self Refresh Mode)	L	L	L	H	X	AR / SR	1, 6, 7
Mode Register Set	L	L	L	L	Op-Code	MRS	1, 2

1. CKE is high for all commands shown except Self Refresh.
2. BA0, BA1 select either the Base or the Extended Mode Register (BA0 = 0, BA1 = 0 selects Mode Register; BA0 = 1, BA1 = 0 selects ,Extended Mode Register; other combinations of BA0-BA1 are reserved; A0-A12 provide the op-code to be written to the selected Mode Register.)
3. BA0-BA1 provide bank address and A0-A12 provide row address.
4. BA0, BA1 provide bank address; A0-A<sub>i</sub> provide column address (where  $i = 9$  for x8 and 9, 11 for x4); A10 high enables the Auto Precharge feature (non-persistent), A10 low disables the Auto Precharge feature.
5. A10 LOW: BA0, BA1 determine which bank is precharged.A10 HIGH: all banks are precharged and BA0, BA1 are "Don't Care."
6. This command is auto refresh if CKE is high; Self Refresh if CKE is low.
7. Internal refresh counter controls row and bank addressing; all inputs and I/Os are "Don't Care" except for CKE.
8. Applies only to read bursts with Auto Precharge disabled; this command is undefined (and should not be used) for read bursts with Auto Precharge enabled or for write bursts
9. Deselect and NOP are functionally interchangeable.

### Active

The Active command is used to open (or activate) a row in a particular bank for a subsequent access. The value on the BA0,BA1 inputs selects the bank, and the address provided on inputs A0-A12 selects the row. This row remains active (or open) for accesses until a Precharge (or Read or Write with Auto Precharge) is issued to that bank. A Precharge (or Read or Write with Auto Precharge) command must be issued and completed before opening a different row in the same bank.

### Read

The Read command is used to initiate a burst read access to an active (open) row. The value on the BA0, BA1 inputs selects the bank, and the address provided on inputs A0-A<sub>i</sub>, A<sub>j</sub> (where  $[i = 9, j = \text{don't care}]$  for x8; where  $[i = 9, j = 11]$  for x4) selects the starting column location. The value on input A10 determines whether or not Auto Precharge is used. If Auto Precharge is selected, the row being accessed is precharged at the end of the Read burst; if Auto Precharge is not selected, the row remains open for subsequent accesses.

---

## Write

The Write command is used to initiate a burst write access to an active (open) row. The value on the BA0, BA1 inputs selects the bank, and the address provided on inputs A0-Ai, Aj (where [i = 9, j = don't care] for x8; where [i = 9, j = 11] for x4) selects the starting column location. The value on input A10 determines whether or not Auto Precharge is used. If Auto Precharge is selected, the row being accessed is precharged at the end of the Write burst; if Auto Precharge is not selected, the row remains open for subsequent accesses. Input data appearing on the DQs is written to the memory array subject to the DM input logic level appearing coincident with the data. If a given DM signal is registered low, the corresponding data is written to memory; if the DM signal is registered high, the corresponding data inputs are ignored, and a Write is not executed to that byte/column location.

## Auto Refresh

Auto Refresh is used during normal operation of the DDR SDRAM and is analogous to CAS Before RAS (CBR) Refresh in previous DRAM types. This command is nonpersistent, so it must be issued each time a refresh is required. The refresh addressing is generated by the internal refresh controller. This makes the address bits "Don't Care" during an Auto Refresh command. The 256Mb DDR SDRAM requires Auto Refresh cycles at an average periodic interval of 7.8µs (maximum).

## Self Refresh

The Self Refresh command can be used to retain data in the DDR SDRAM, even if the rest of the system is powered down. When in the self refresh mode, the DDR SDRAM retains data without external clocking. The Self Refresh command is initiated as an Auto Refresh command coincident with CKE transitioning low. The DLL is automatically disabled upon entering Self Refresh, and is automatically enabled upon exiting Self Refresh (200 clock cycles must then occur before a Read command can be issued). Input signals except CKE (low) are "Don't Care" during Self Refresh operation.

The procedure for exiting self refresh requires a sequence of commands. CK (and CK) must be stable prior to CKE returning high. Once CKE is high, the SDRAM must have NOP commands issued for tXSNR because time is required for the completion of any internal refresh in progress. A simple algorithm for meeting both refresh and DLL requirements is to apply NOPs for 200 clock cycles before applying any other command.

---

## Operations:

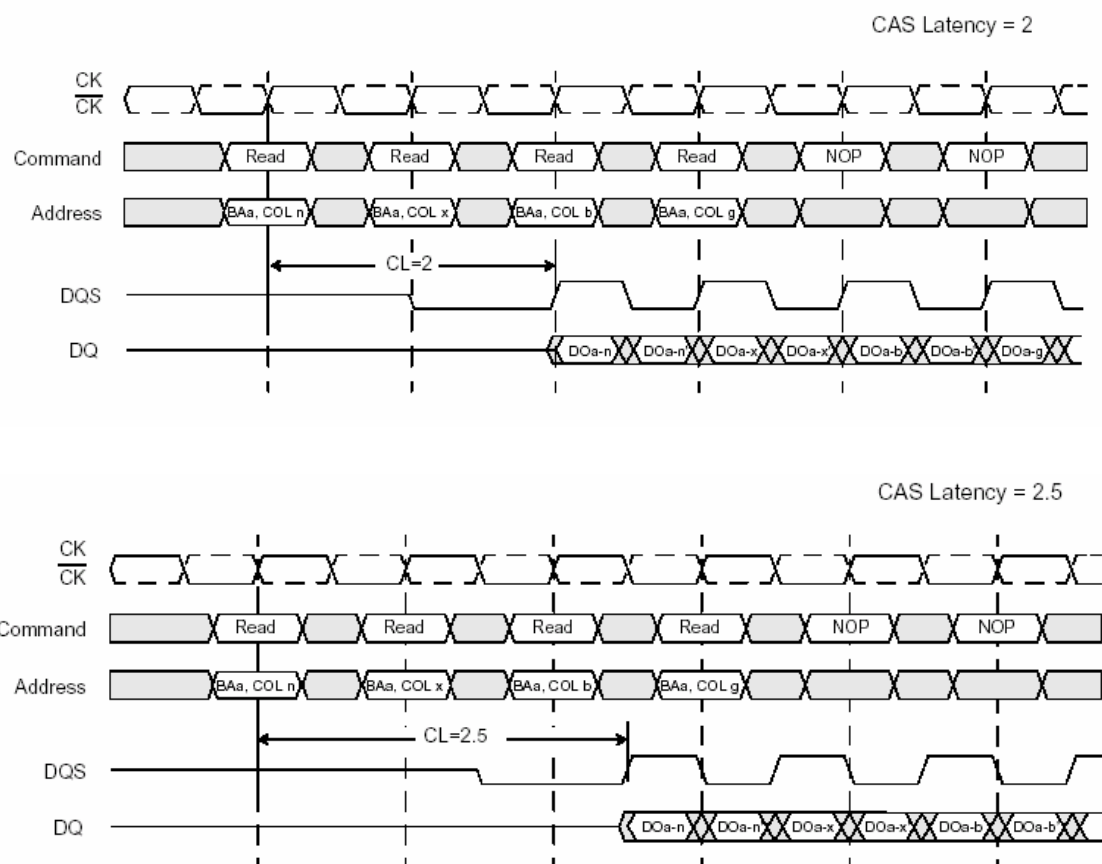
### Reads

Subsequent to programming the mode register with CAS latency, burst type, and burst length, Read bursts are initiated with a Read command.


The starting column and bank addresses are provided with the Read command and Auto Precharge is either enabled or disabled for that burst access. If Auto Precharge is enabled, the row that is accessed starts precharge at the completion of the burst, provided tRAS has been satisfied. For the generic Read commands used in the following illustrations, Auto Precharge is disabled.

During Read bursts, the valid data-out element from the starting column address is available following the CAS latency after the Read command. Each subsequent data-out element is valid nominally at the next positive or negative clock edge (i.e. at the next crossing of CK and CK). The following timing figure entitled "Read Burst: CAS Latencies (Burst Length=4)" illustrates the general timing for each supported CAS latency setting. DQS is driven by the DDR SDRAM along with output data. The initial low state on DQS is known as the read preamble; the low state coincident with the last data-out element is known as the read postamble. Upon completion of a burst, assuming no other commands have been initiated, the DQs and DQS goes High-Z. Data from any Read burst may be concatenated with or truncated with data from a subsequent Read command. In either case, a continuous flow of data can be maintained. The first data element from the new burst follows either the last element of a completed burst or the last desired data element of a longer burst which is being truncated. The new Read command should be issued x cycles after the first Read command, where x equals the number of desired data element pairs (pairs are required by the 2n prefetch architecture). This is shown in timing figure entitled "Consecutive Read Bursts: CAS Latencies (Burst Length =4 or 8)". A Read command can be initiated on any positive clock cycle following a previous Read command. Nonconsecutive Read data is shown in timing figure entitled "Non-Consecutive Read Bursts: CAS Latencies (Burst Length = 4)". Full-speed Random Read Accesses: CAS Latencies (Burst Length = 2, 4 or 8) within a page (or pages) can be performed as shown on following:

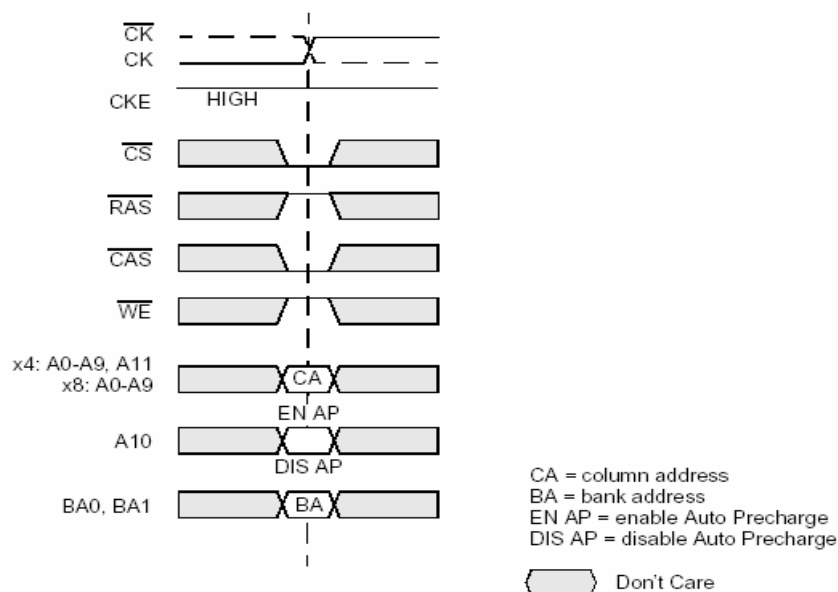
## Random Read Accesses: CAS Latencies (Burst Length = 2, 4 or 8)



DO a-n, etc. = data out from bank a, column n etc.  
 n' etc. = odd or even complement of n, etc. (i.e., column address LSB inverted).  
 Reads are to active rows in any banks.  
 Shown with nominal  $t_{AC}$ ,  $t_{DQSC}$ , and  $t_{DQSQ}$ .

 Don't Care

## Read Command



## Writes

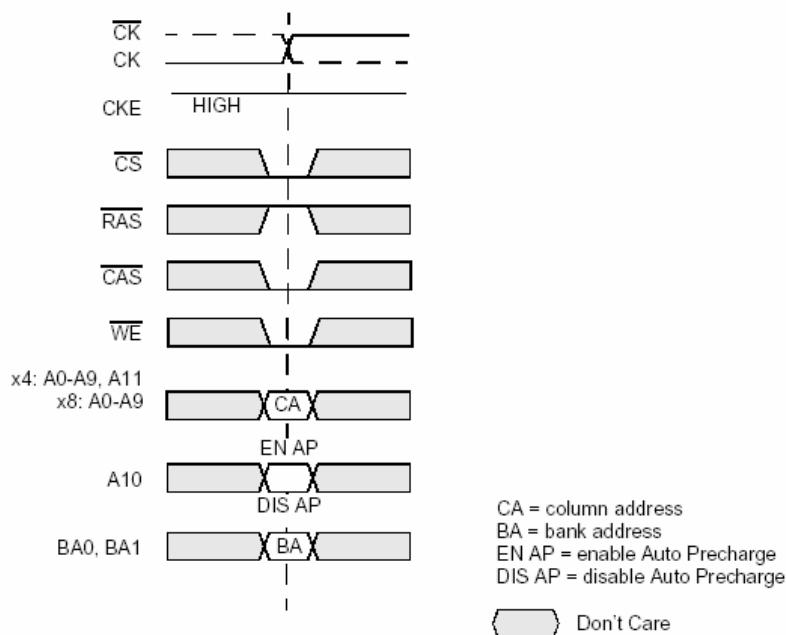
Write bursts are initiated with a Write command, as shown in timing figure *Write Command* on following: The starting column and bank addresses are provided with the Write command, and Auto Precharge is either enabled or disabled for that access. If Auto Precharge is enabled, the row being accessed is precharged at the completion of the burst. For the generic Write commands used in the following illustrations, Auto Precharge is disabled.

During Write bursts, the first valid data-in element is registered on the first rising edge of DQS following the write command, and subsequent data elements are registered on successive edges of DQS. The Low state on DQS between the Write command and the first rising edge is known as the write preamble; the Low state on DQS following the last data-in element is known as the write postamble. The time between the Write command and the first corresponding rising edge of DQS ( $t_{DQSS}$ ) is specified with a relatively wide range (from 75% to 125% of one clock cycle), so most of the Write diagrams that follow are drawn for the two extreme cases (i.e.  $t_{DQSS}(\min)$  and  $t_{DQSS}(\max)$ ). Timing figure *Write Burst (Burst Length = 4)* on page 33 shows the two extremes of  $t_{DQSS}$  for a burst of four. Upon completion of a burst, assuming no other commands have been initiated, the DQs and DQS enters High-Z and any additional input data is ignored. Data for any Write burst may be concatenated with or truncated with a subsequent Write command. In either case, a continuous flow of input data can be maintained.

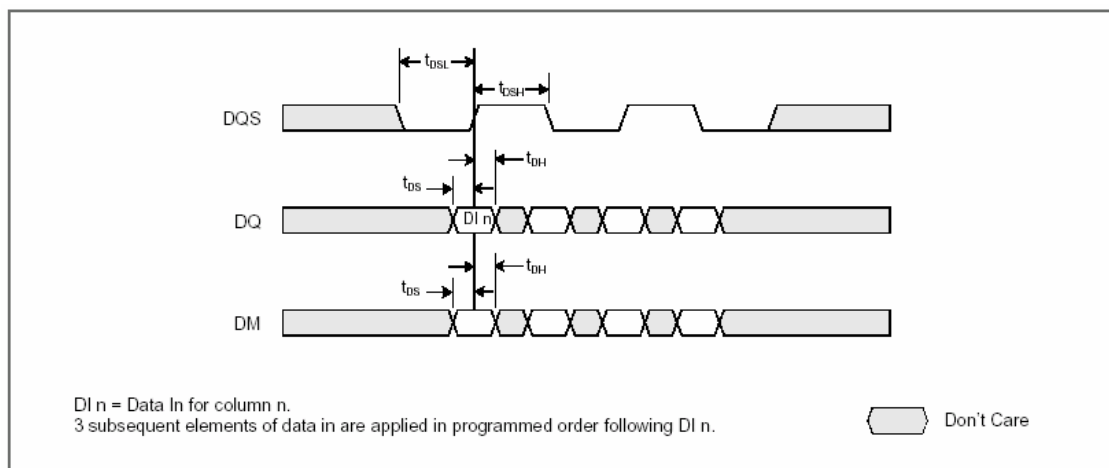


The new Write command can be issued on any positive edge of clock following the previous Write command. The first data element from the new burst is applied after either the last element of a completed burst or the last desired data element of a longer burst which is being truncated. The new Write command should be issued x cycles after the first Write command, where x equals the number of desired data element pairs (pairs are required by the 2n prefetch architecture).

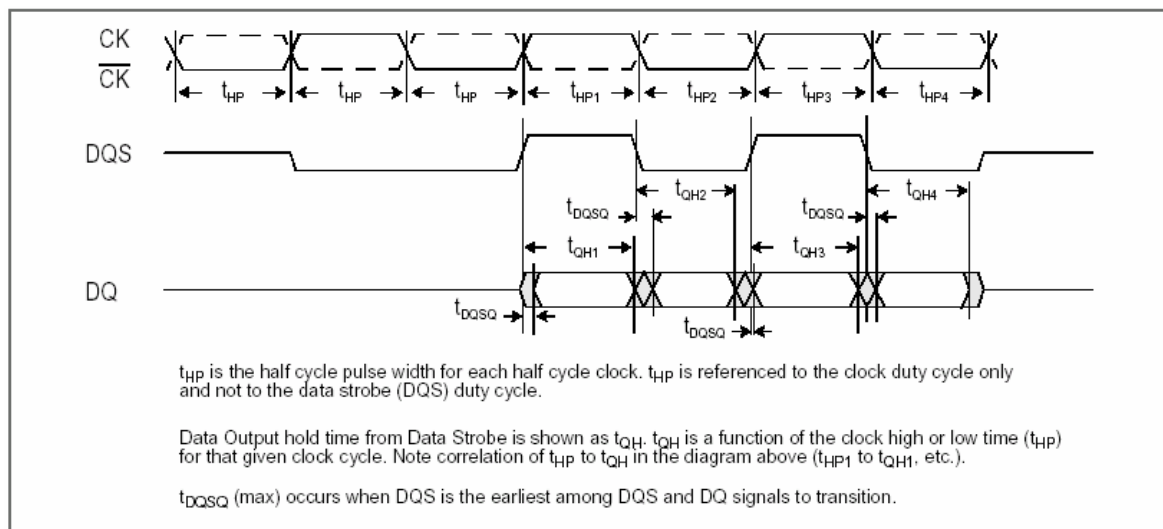
## Write Command



## Data Input (Write)



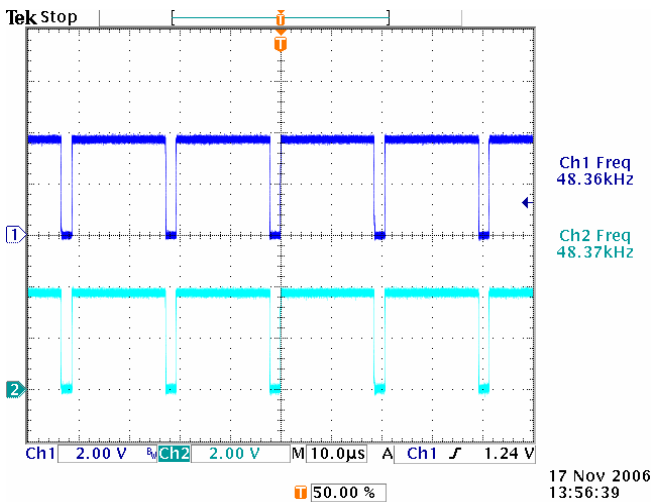
## Data Output (Read)



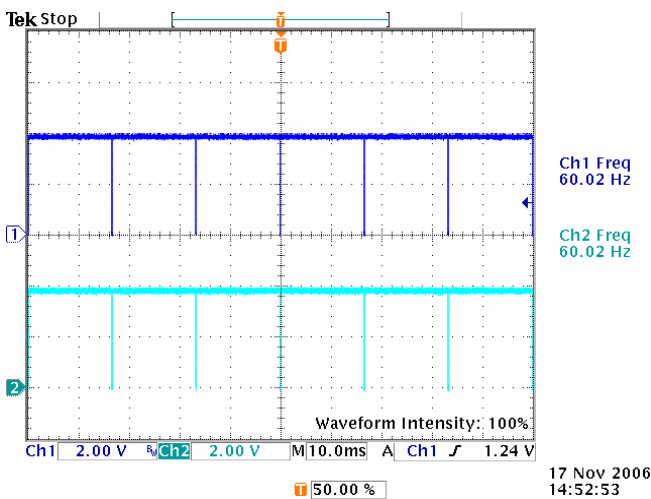
# Chapter8      Waveforms

PC MODE(1366X768 60HZ)

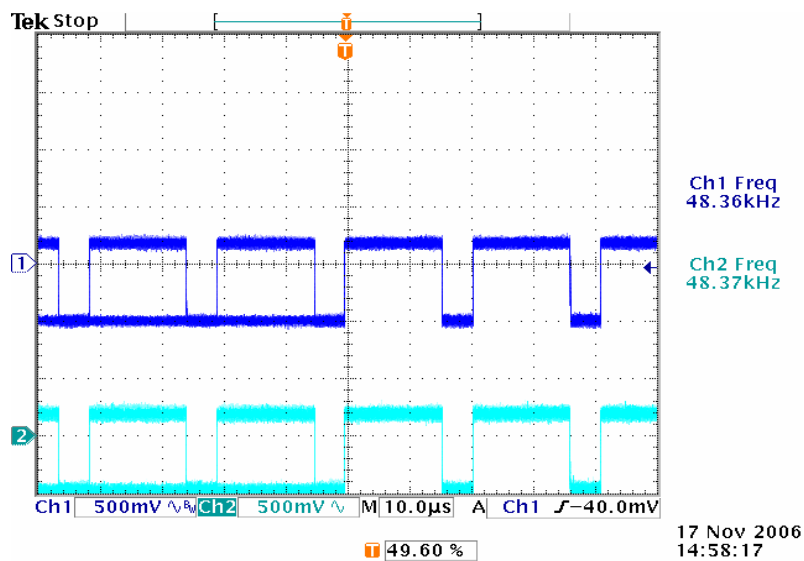
CH1 H-sync (R209); CH2 H-sync (L52)



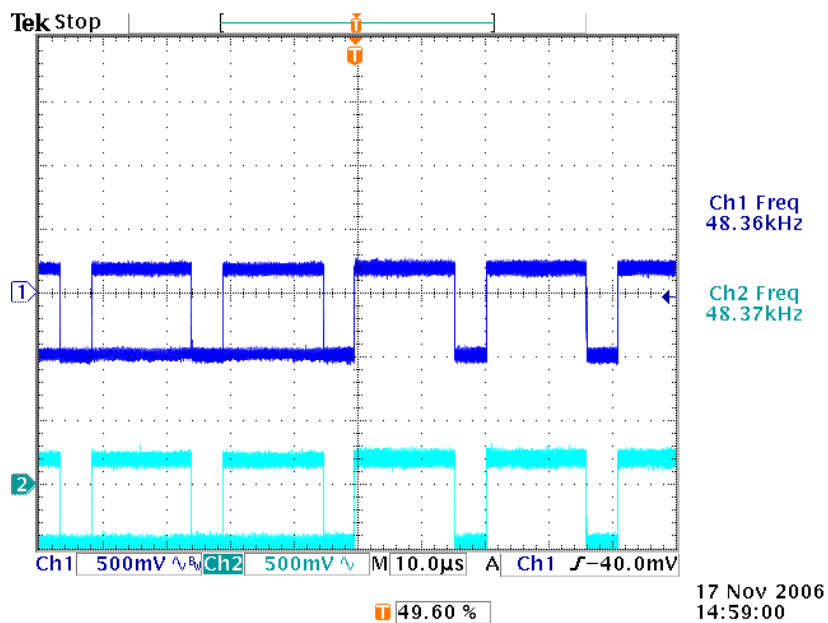
CH1 V-sync (R213); CH2 V-sync (L53)



# CH1 R (R203) CH1 R (C95)



# CH1 B (R199) CH1 B (C92)



Tek Stop

Ch1 Freq 48.36kHz

Ch2 Freq 48.36kHz

Ch1 500mV

Ch2 500mV

M 10.0μs

Ch1 40.0mV

49.60 %

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14:59:31

Task Stop

Ch1 RMS 1.03 V

Ch2 RMS 3.99 V

Ch1 1.00 V

Ch2 5.00 V

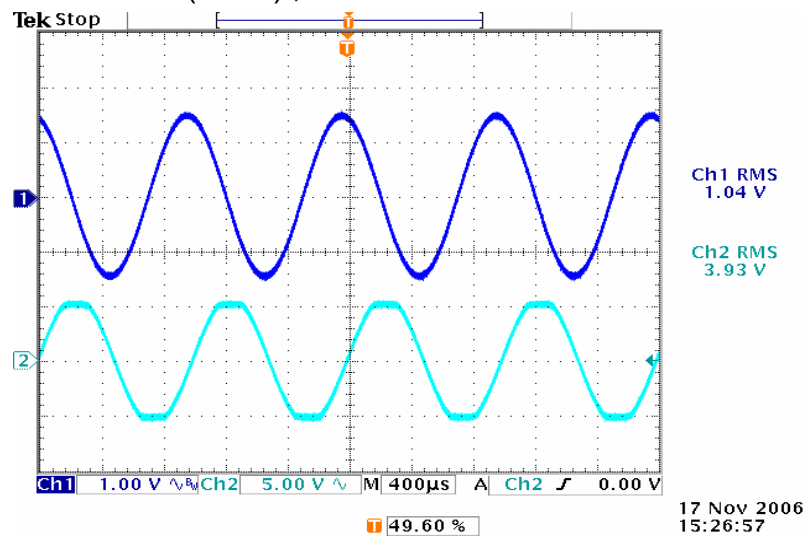
M 400μs

Ch2 0.00 V

49.60 %

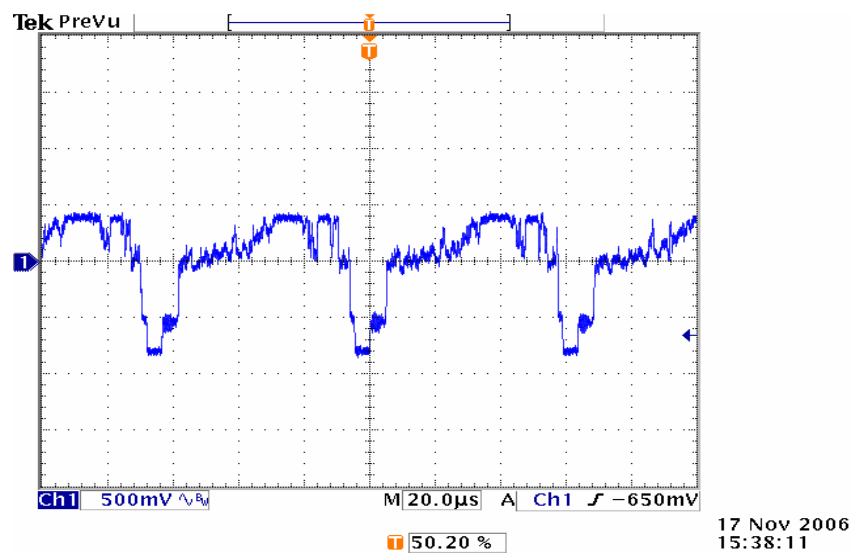
17 Nov 2006 15:26:28

CH1 VGAR (R208) ; CH2 VOL

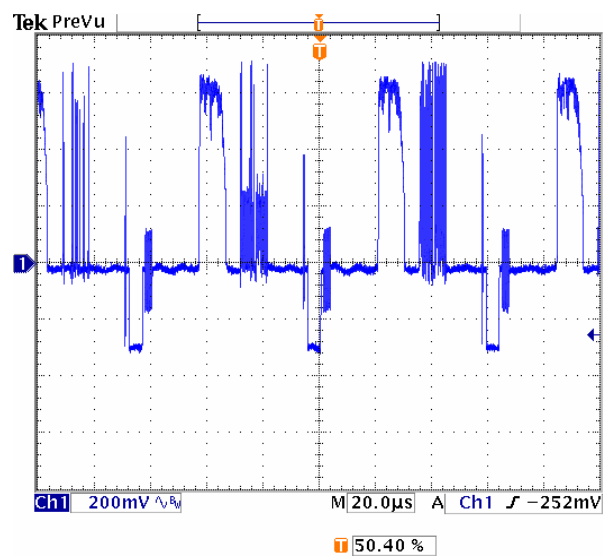


AV&TV MODE (AV1/AV2/TV) VIDEO

CH1 TV

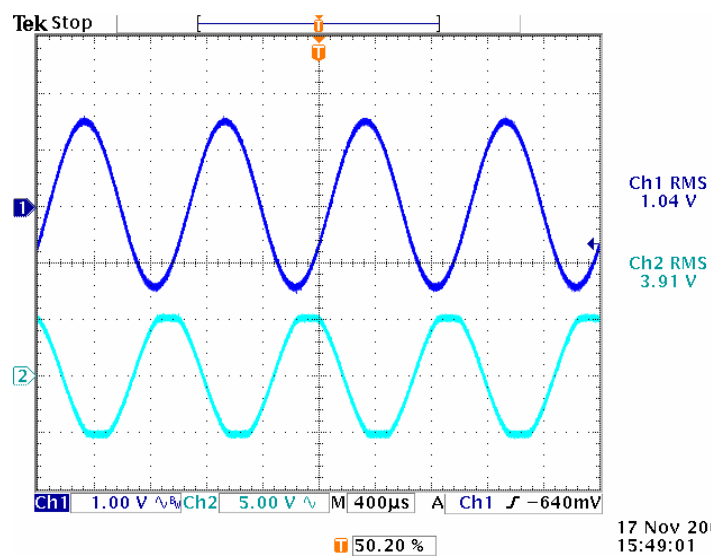


CH1 AV1



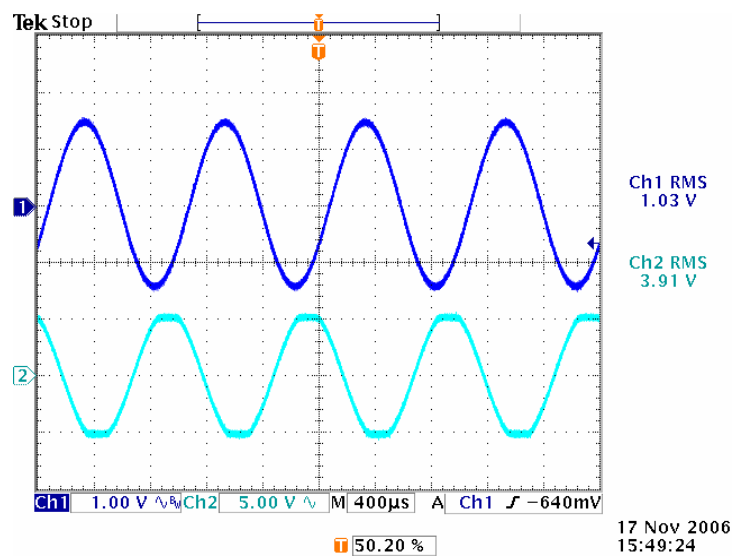
17 Nov 2006  
15:35:11

CH1 AV1L IN ; CH2 AV L (Speaker)

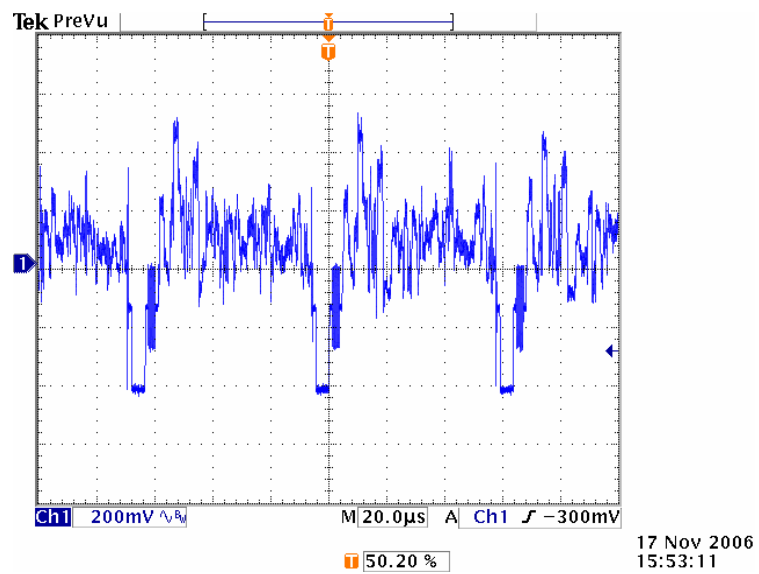


17 Nov 2006  
15:49:01

CH1 AV1 IN R ; CH2 AV\_R (Speaker)

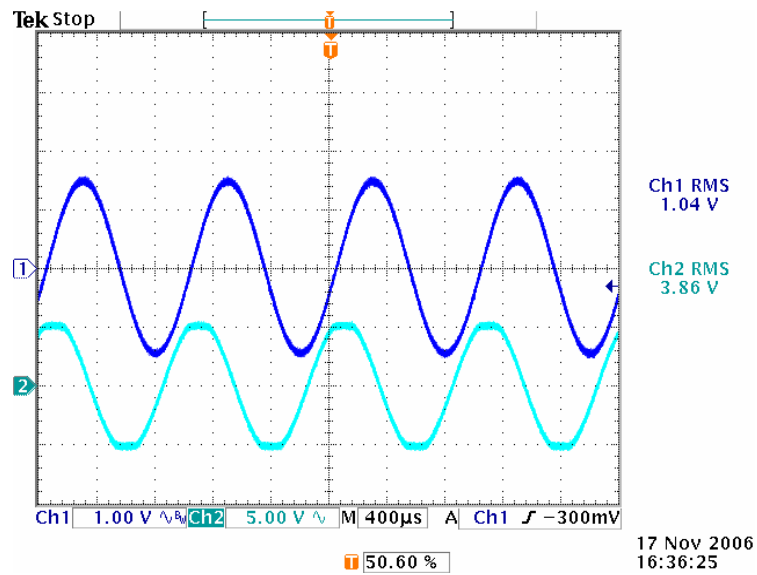


CH1 AV2

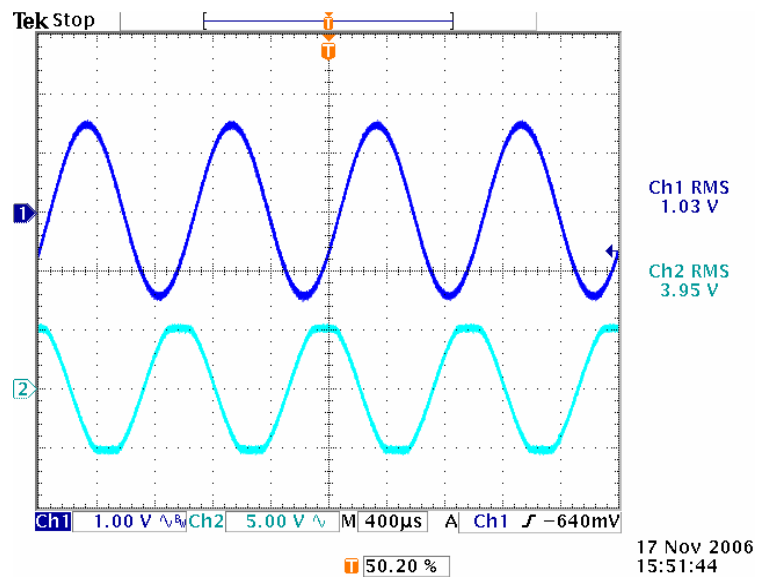




CH1 AV2L IN ; CH2 AV L (Speaker)

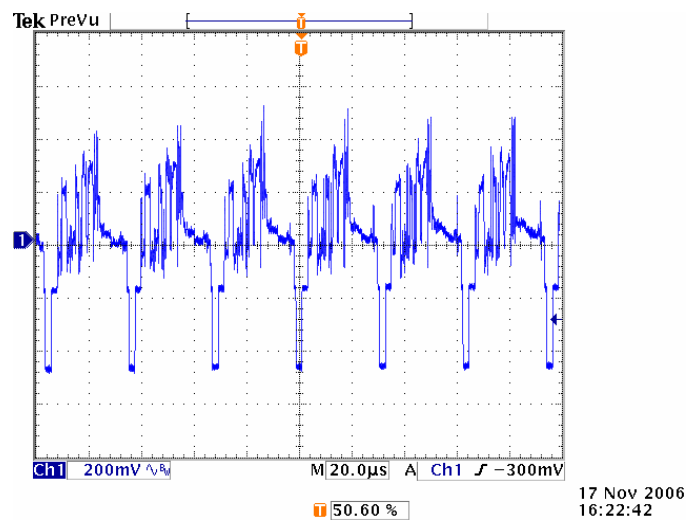


CH1 AV2 IN R ; CH2 AV\_R (Speaker)

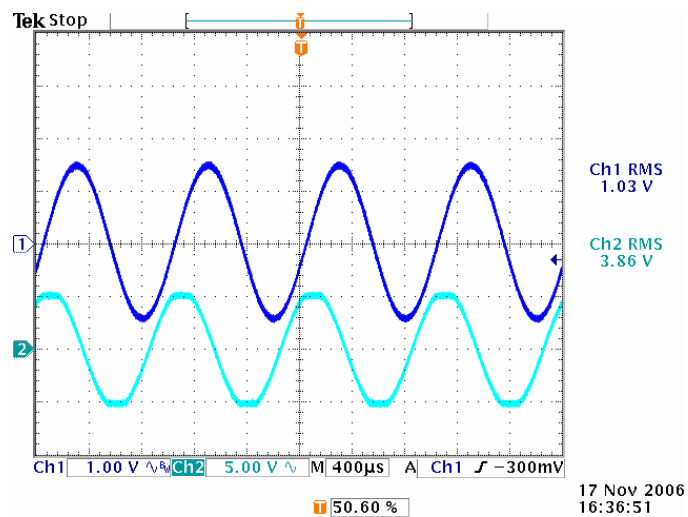


## COMPONENT MODE

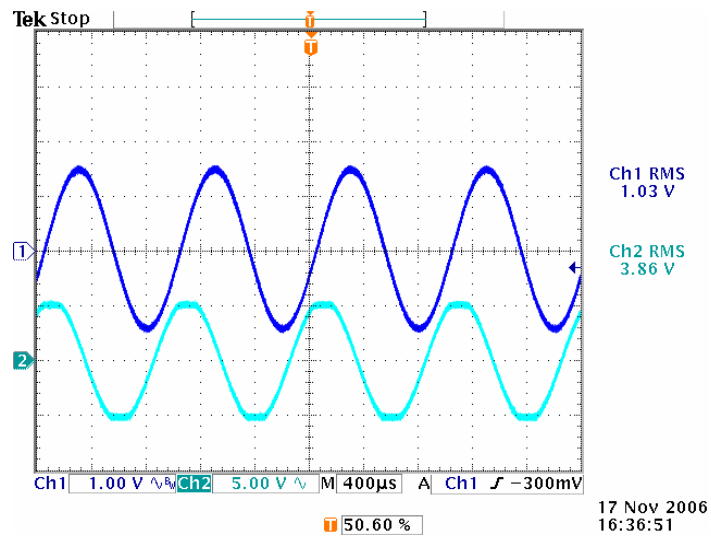
CH1 YPBPR1\_Y



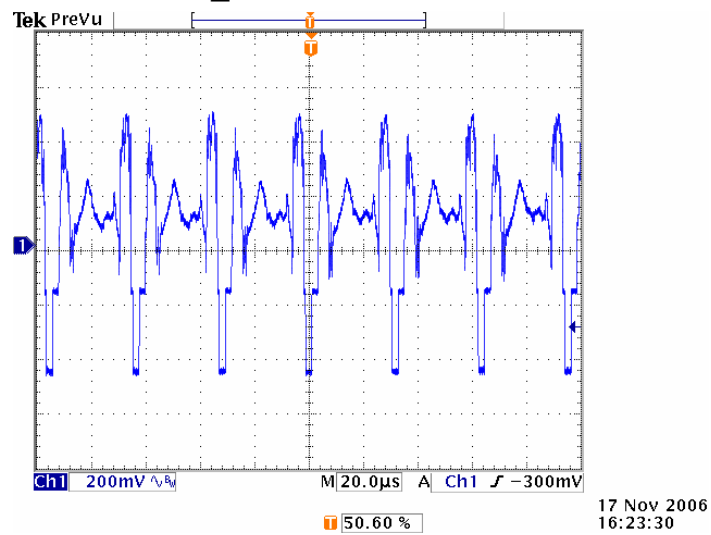
CH1 YPBPR1\_L IN CH2 L (Speaker)



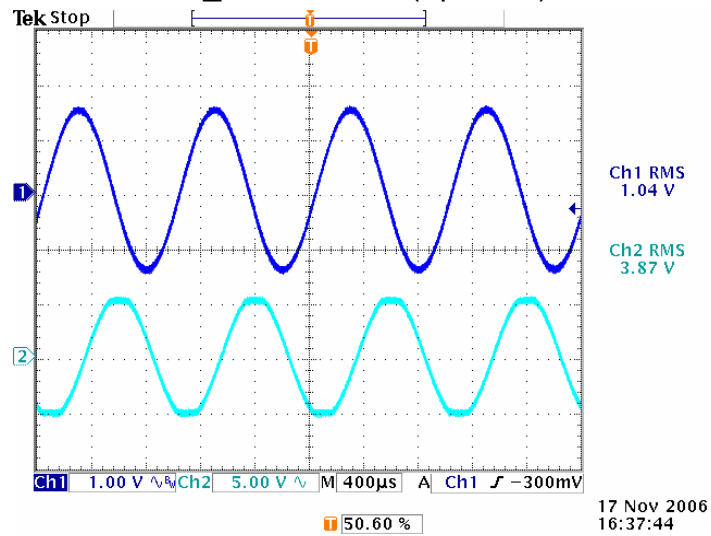
CH1 YPBPR1\_R IN CH2 R (Speaker)



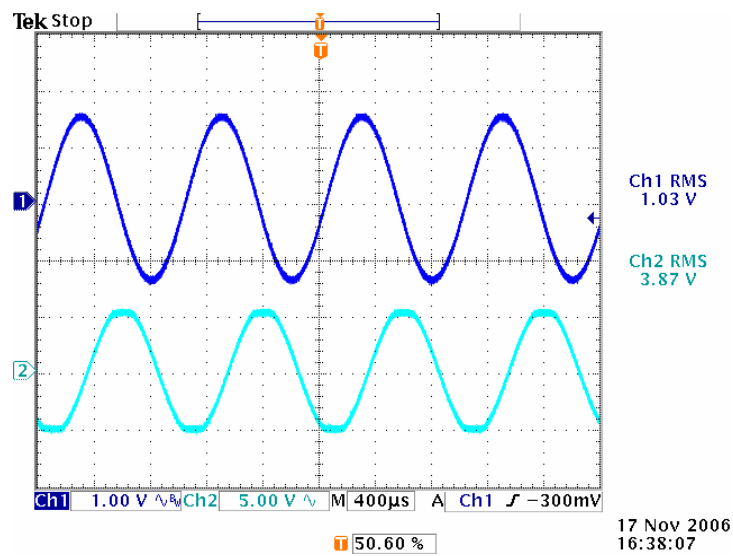
CH1 YPBPR2\_Y



CH1 YPBPR2\_L IN CH2 L (Speaker)

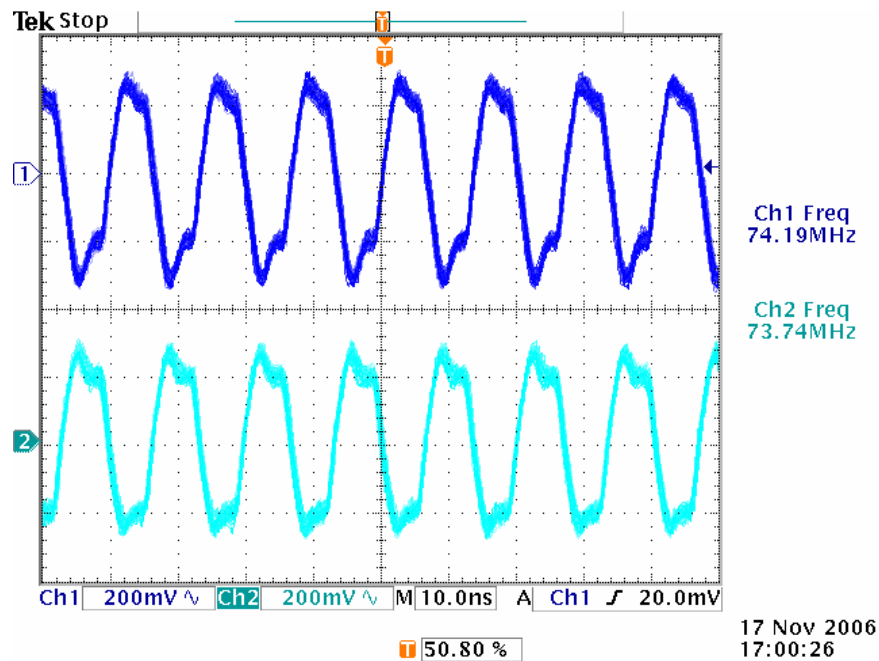


CH1 YPBPR2\_R IN CH2 R (Speaker)



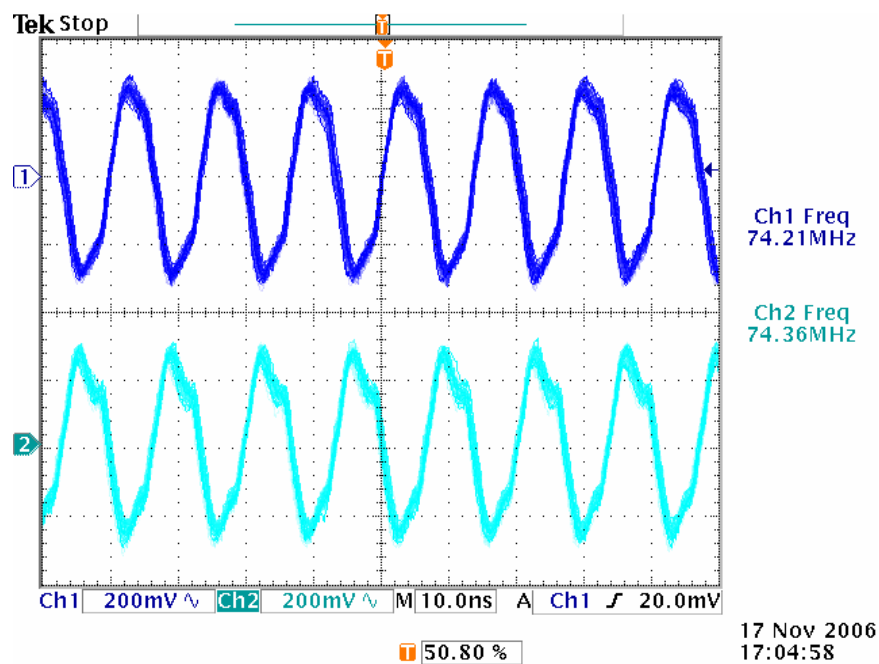
## HDMI 1

CH1 RX1; CH2 RX1-B



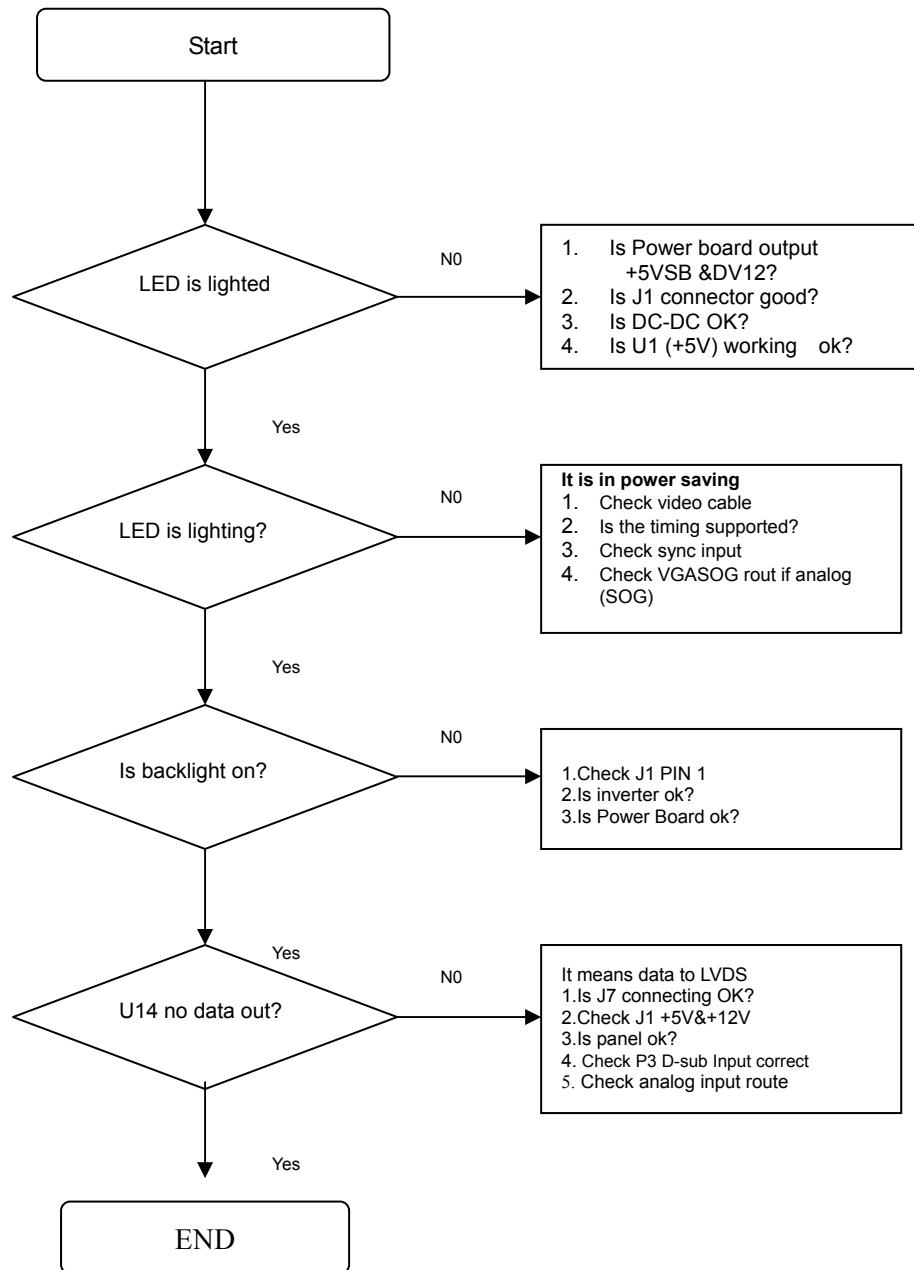
## HDMI 2

CH1 RX1; CH2 RX1-B



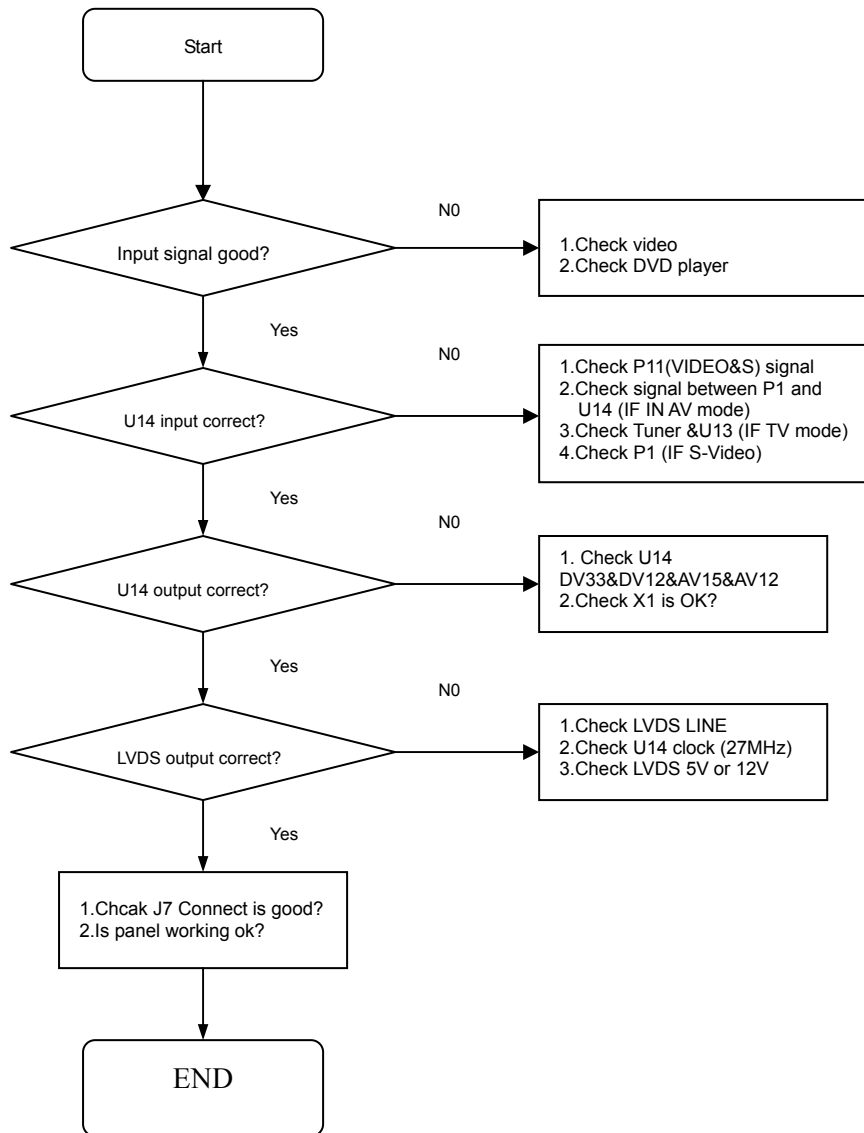
# Chapter 9    Trouble shooting

## MONITOR DISPLAY NOTHING (PC MODE)

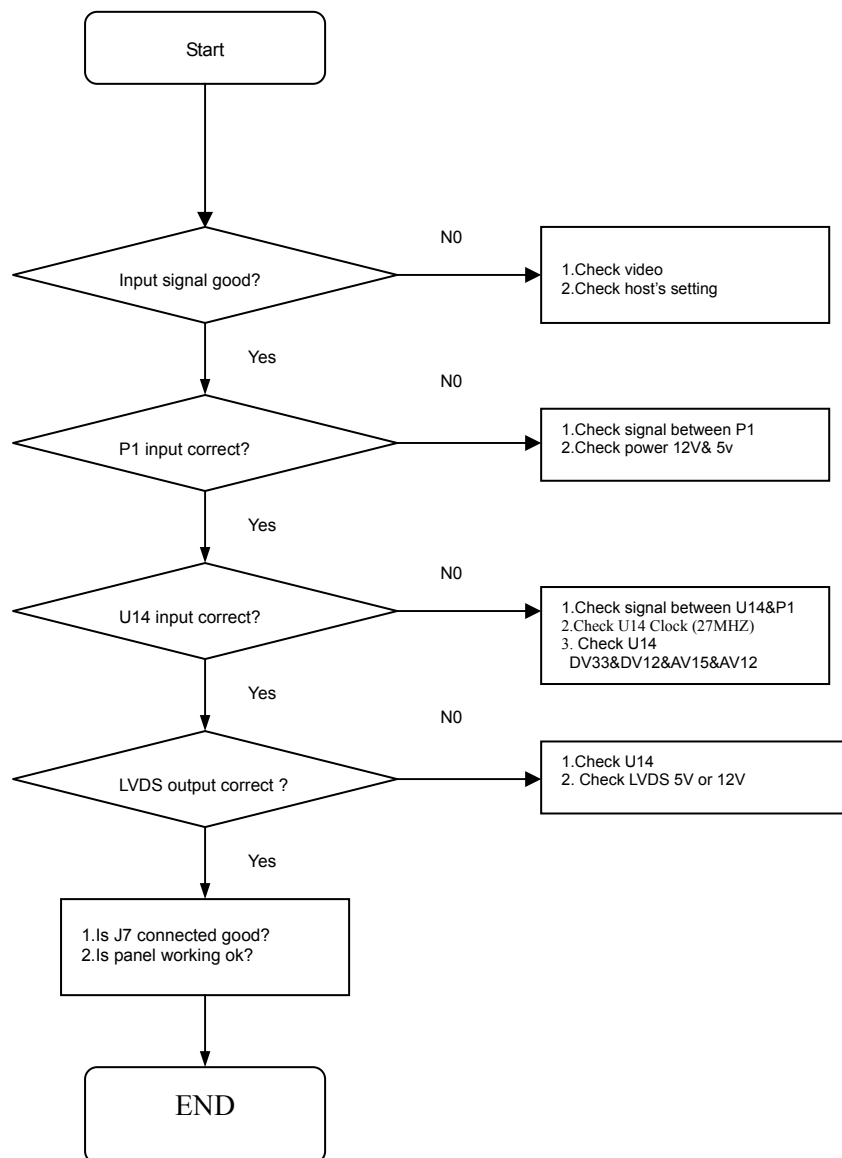


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(TV, COMPOSITE VIDEO1,, S-VIDEO) IS NOT DISPLAY CORRECTLY



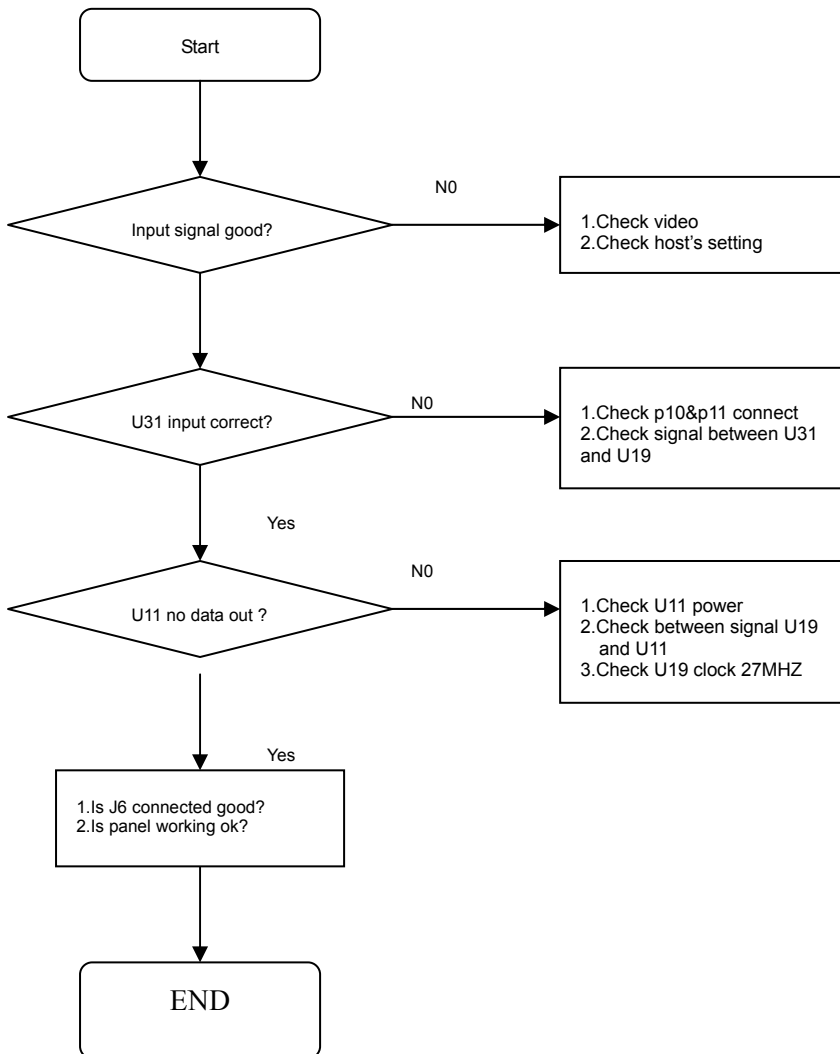
## (COMPONENT) IS NOT DISPLAY CORRECTLY



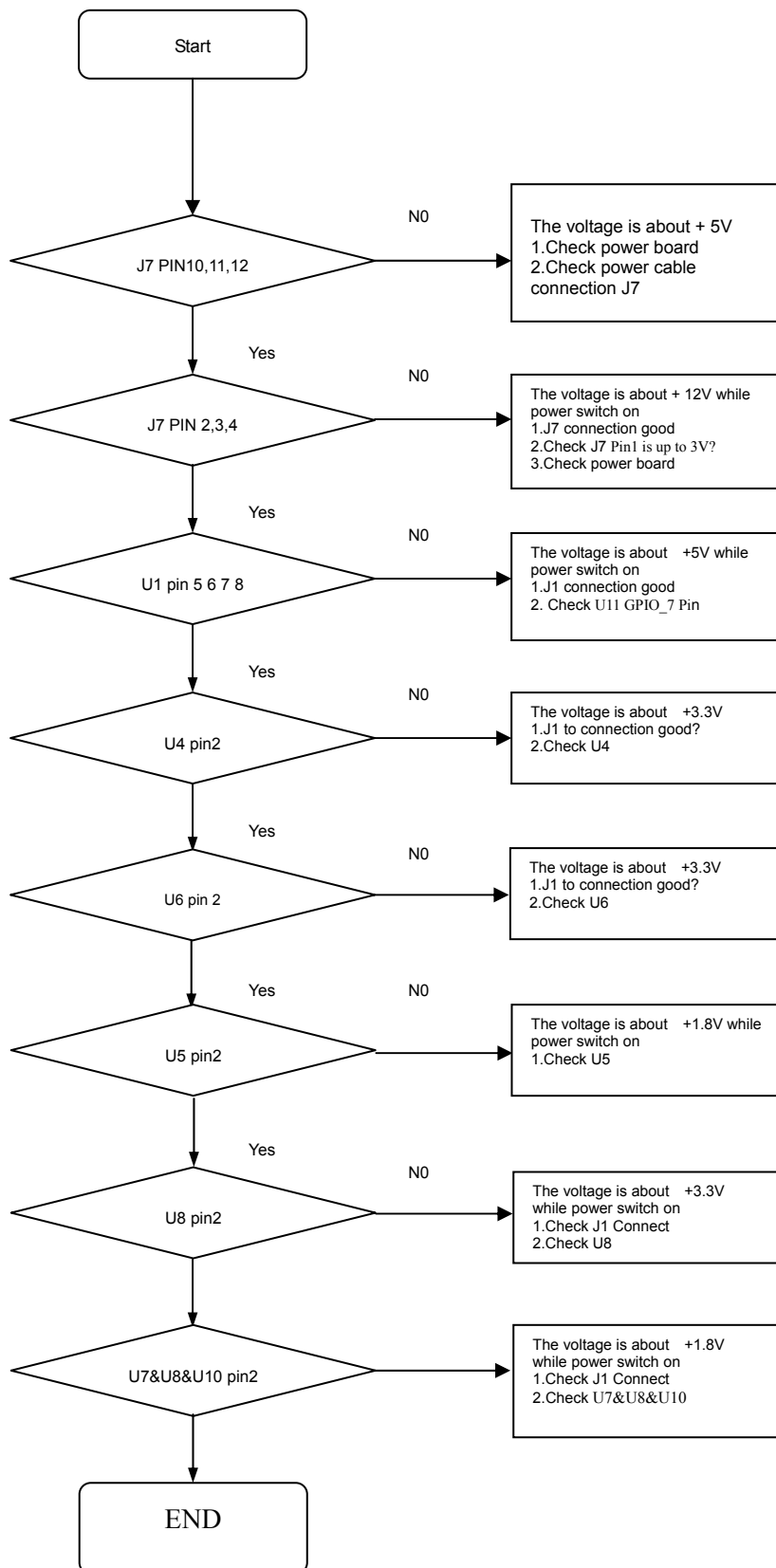


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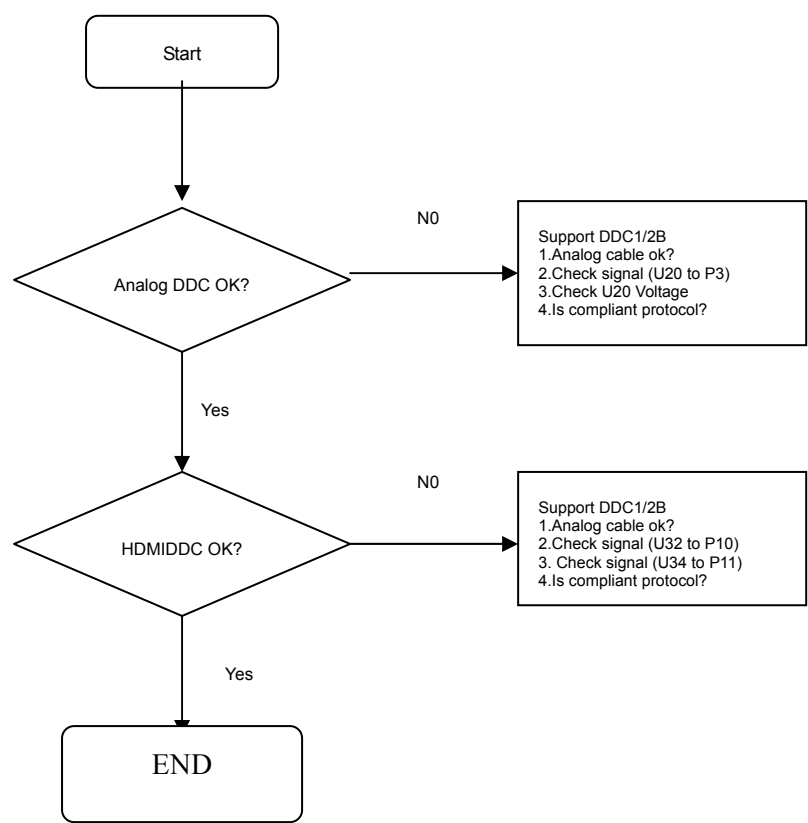
## (HDMI) IS NOT DISPLAY CORRECTLY



## TROUBLE OF DC-DC CONVERTER

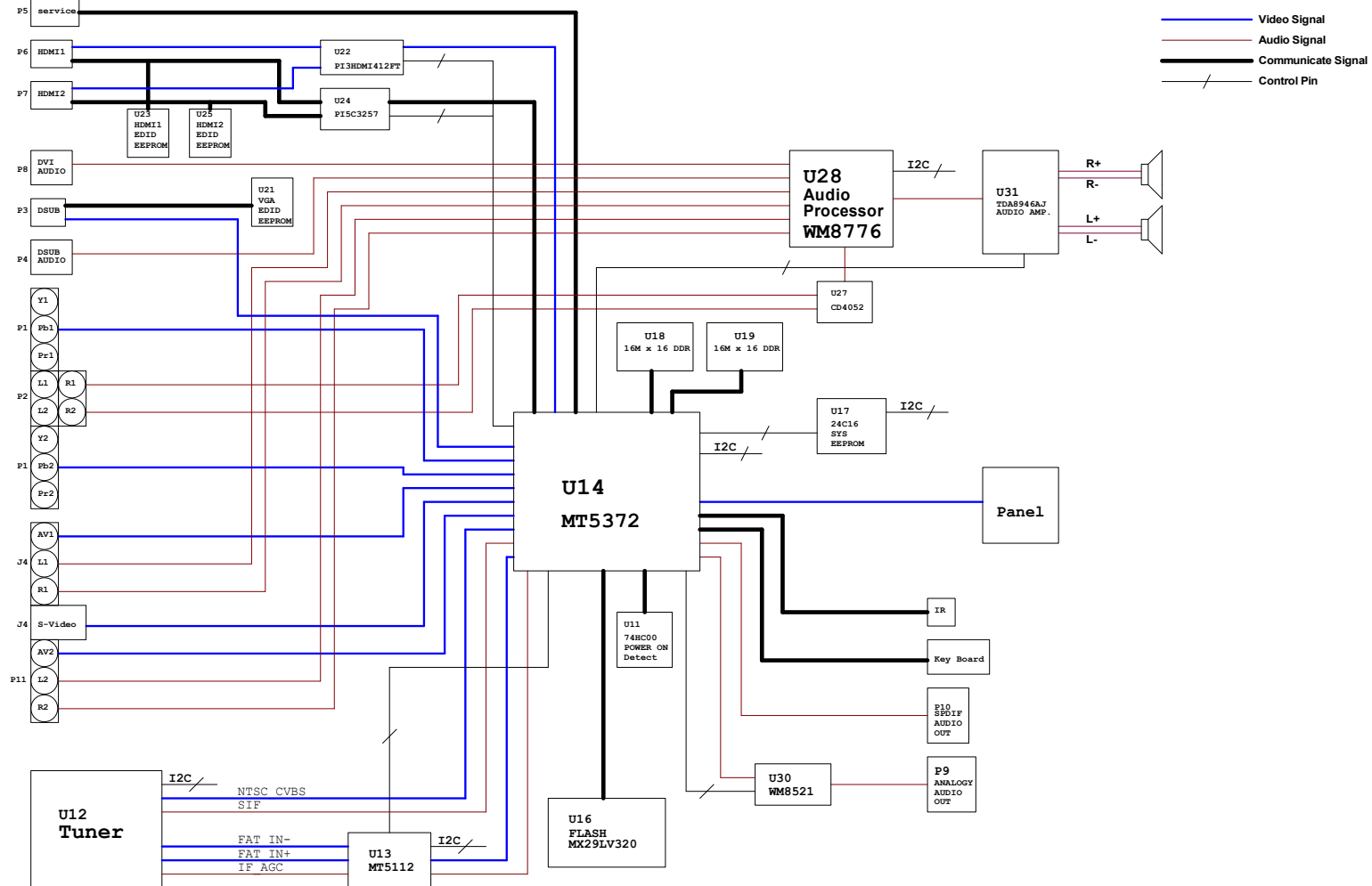


TROUBLE OF DDC READING





## Main Board Block Diagram



CONFIDENTIAL - DO NOT COPY

# Chapter 11 Spare Parts List

PART NO	DESCRIPTION	LOC	QTY	REMARK
0185-1302-0073	FUSE 125V/3A SMD (R451003) LF	F1, F2	2	
0320-4000-0142	POWER CORD 110V UL/CSA 1800mm BLK N.M. (VINC)		1	
0321-0000-0411	AV CABLE RCA(Y/W/R) 1800mm BLK (VINC)		1	
0360-1000-0420	POWER INDUCTOR L:10uH 1.44A 5.8x5.2mm SMD LF	L26	1	
0390-6005-2103	SCHOTTKY DIODE 0.5A/40V MBR0540T1G SOD-123 LF	D5	1	
0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	Q1, Q10, Q11, Q13, Q15, Q16, Q17, Q18, Q19, Q2, Q21, Q22, Q24, Q26, Q3, Q4, Q5, Q8, Q9	19	
0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF			
0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	Q12, Q14, Q23, Q25	4	
0410-5000-5711	TRANSISTOR PMBS3906 SMD LF			
0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	U1, U32	2	
0420-2005-8635	MOSFET 3.6A 30V AM2343P-T1-PF SOT-23 3PIN LF	QF3	1	
0430-4013-3109	IC TDA8946AJ 17PIN DIP LF	U31	1	
0430-6006-1079	IC LDO AP1084KLA ADJ TO-263-3L LF	U10	1	
0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	U2, U33, U4, U7, U8, U9	6	
0430-6011-3204	IC LM7805CT TO-220 3PIN LF			
0430-6011-3210	IC MC7805CTG 3PIN TO-220 LF	U3	1	
0430-6015-6099	IC RESET STL8110GCL438 4.38V SOT-23 3PIN LF	U15	1	
0430-6015-8079	IC DC/DC CONVERTER AP1522WA SOT23-5 5PIN LF	U34	1	
0430-7043-1999	IC DEMODULATOR MT5112BD LQFP 100PIN LF	U13	1	
0430-7043-5092	IC SWITCH PI5C3257QE QSOP 16PIN LF	U24	1	
0430-7043-6999	IC SCALER MT5372AJ-L BGA 588PIN LF	U14	1	
0430-7044-1092	IC SWITCH PI3HDMI412FTZHE TQFN 42PIN LF	U22	1	
0980-0103-3060	MODULE TUNER DTVS205CH201A L-F	U12	1	
1801-0124-3011	FRONT BEZEL (VX32L)(ABS, Piano Black) ASS'Y		1	
1801-0214-9010	REAR COVER (VX32L)(ABS, SONY White) ASS'Y		1	
1801-0524-3010	BASE (VX37L HDTV)(ABS) ASS'Y		1	
1925-1000-3500	EPS FOAM_TL (VX32L)		1	
1925-1000-3510	EPS FOAM_TR (VX32L)		1	
1925-1000-3520	EPS FOAM_BL (VX32L)		1	
1925-1000-3530	EPS FOAM_BR (VX32L)		1	
1925-1100-0230	PE BAG 320*230*0.04T		2	
1925-1100-0280	PE BAG (180W*290L*0.04t)(PE-LD)(ACC.-1)		1	
1925-1100-2320	PE BAG (VX32L HDTV)		1	
1925-1200-7080	ACCESSARY BOX (330W*230D*50H)		1	
1925-1200-9060	CARTON TRAY (VX32L)		1	
1925-1200-9190	CARTON VIZIO VX32L HDTV		1	
1925-1300-7080	Brochure VIZIO Series		1	
1925-1300-7980	Quick Setup Guide VIZIO VX32L HDTV		1	
1925-1300-7990	MANUAL VIZIO VX32L HDTV		1	
1925-1400-2710	Register CARD/VIZIO L15		1	

PART NO	DESCRIPTION	LOC	QTY	REMARK
1925-1900-0610	CARTON JOINT (TM-32V)		4	
1925-2000-0030	Polishing Cloth VIZIO P42 HDTV10A		1	
1936-1100-8780	B/C LBL VIZIO VX32L HDTV		1	
1936-1300-1550	SERIAL NO.LBL byd:sign		1	
1936-1600-1180	TECHNOLOGY LOGO LBL VIZIO VX20L/32/37 HDTV		1	
1947-1200-0310	ACETATE CLOTH TAPE ( 醋酸布膠帶 ) 27*75mm		1	
1947-1200-0400	ACETATE CLOTH TAPE ( 醋酸布膠帶 ) 20*45mm		21	
1947-1200-0820	ACETATE CLOTH TAPE ( 醋酸布膠帶 ) 60*45mm		1	
1947-1200-1560	FILAMENT TAPE (TIBON 25wide)		0.7	
1947-1200-3680	ACETATE CLOTH TAPE ( 醋酸布膠帶 ) 40*80mm		1	
1947-1200-3870	MYLAR (18.0*28.0*0.6t)(VX32L)		1	
1947-1200-3900	SPONGE (22.0L*55.0W*0.6t)		6	
1947-1700-0130	SHIELDING AL.TAPE (70.0*50.0)		1	
1947-1700-0550	SHIELDING AL. TAPE (100.L*45.0W*0.15T)		1	
1947-1800-0030	GASKET BLOCK (10W*17H*60L)		6	
1947-1800-0080	GASKET BLOCK (17*34*25mm) (773GT)		2	
1947-1800-0460	GASKET BLOCK (3.0H*10.0W*100.0L mm)		2	
1947-1900-0030	HEATPATH (25x14mm)		1	
3632-0012-0156	DISPLAY BD ASS'Y VX32L HDTV		1	
3632-0022-0146	CONNECTOR BD ASS'Y VX32L HDT		1	
3632-0062-0150	MAIN BD ASS'Y VX32L HDTV_LG		1	
3642-0022-0189	IR BD ASS'Y GV42L HDTV		1	

## Chapter 12 Complete Parts List

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9632-8500-3053 LCD TV MONITOR 32" VX32L HDTV (LG)(ABS,433C)

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			3632-0022-0312	PACKING ASS'Y VX32L HDTV	1
2			3632-0052-0331	PANEL ASS'Y VX32L HDTV (LG)(ABS,433C)	1



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### 3632-0022-0312 PACKING ASS'Y VX32L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			1701-0800-2150	REAR PLATE VIZIO VX32L HDTV	1
2			1925-1000-3500	EPS FOAM_TL (VX32L)	1
3			1925-1000-3510	EPS FOAM_TR (VX32L)	1
4			1925-1000-3520	EPS FOAM_BL (VX32L)	1
5			1925-1000-3530	EPS FOAM_BR (VX32L)	1
6			1925-1100-2320	PE BAG (VX32L HDTV)	1
7			1925-1200-9060	CARTON TRAY (VX32L)	1
8			1925-1200-9190	CARTON VIZIO VX32L HDTV	1
9			1925-1900-0610	CARTON JOINT (TM-32V)	4
10			1936-1100-8780	B/C LBL VIZIO VX32L HDTV	1
11			1936-1300-1550	SERIAL NO.LBL byd:sign	1
12			1936-1600-1180	TECHNOLOGY LOGO LBL VIZIO VX20L/32/37 HDTV	1
13			1947-1200-1560	FILAMENT TAPE (TIBON 25wide)	0.7
14			3632-0022-0393	ACCESSARY ASS'Y VX32L HDTV	1

## 3632-0052-0331 PANEL ASS'Y VX32L HDTV (LG)(ABS,433C)

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			0211-0320-1261	LCD MODULE 32.0" LC320W01-SL01 (LG.PHILIPS)(China)	1
2	SS		0211-0320-1361	LCD MODULE 32.0" LC320W01-SL01 (LG.PHILIPS)(Korea)	
3			0260-0000-0221	AC INLET +VHR5P 1617#22 500mm 1015#18 100mm	1
4			0335-1008-0160	SPEAKER 10W 8ohm(126*56*55) +Wire 870/570mm (L,R)	1
5			0460-1004-0330	WH PH4P-PH4P 1061#26 130mm LF	1
6			0460-1012-0260	WH A2001H02-12P/A2001H02-12P 1061#26 150mm	1
7			0460-3010-0180	WH A1251H02-10P/A1251H02-10P 1571#28 350mm	1
8			0460-3430-0991	WH P240430/FI-X30H 20276#30 220mm+ 吸波材 *2	1
9			0460-4012-0020	WH A2543H12P-PH12P 1007#24 300mm	1
10			0460-4012-0170	WH A2543H00-12P/A2001H02-12P 1007#24 600mm	1
11			0460-4013-0070	WH A2543H13P-PH13P 1007#24 350mm CORE	1
12			0500-0502-0180	POWER BD ASS'Y 0601D03200	1
13	SS		0500-0507-0240	POWER BD ASS'Y DPS-199AP L-F	
14			0950-0000-0010	License: Dolby-AC3 Two-Channel Dolby Digital Deco	1
15			0950-0000-0020	License: MPEG-LA Consumer Products	1
16			0950-0000-0030	License: HDMI	1
17			0960-0000-0100	SOFTWARE MTK HDCP KEY w/mask CODE (China)	1
18			0980-0700-0071	LED BACKLIGHT 18*50 LYSB-4916W/SY-E 400mm	1
19			1701-1000-0430	BASE FOOT (TM-32V)	6
20			1701-1500-0690	WIRE SADDLE (CH-14)	2
21			1701-1500-1660	SPACER SUPPORT (DCB-6.5)	1
22			1701-1500-2500	CABLE CLIP(VX37L)	1
23			1701-1933-2010	SIDE JACK COVER (VX32L_LG)(ABS, SONY White)	1
24			1712-0100-4590	HEAT SINK FIX MTEAL (TM-30A)	1
25			1712-0101-0560	MAIN SHIELD (VX32L)	1
26			1712-0101-0590	WALL MOUNT SUPPORT (VX32L)	4
27			1712-0101-0620	BRACKET FOR AC SOCKET (VX32L HDTV)	1
28			1712-0101-1150	BKT FOR SUPPORT (VX32L)	2
29			1712-0101-1160	CHASSIS (VX32L_LG)	1
30			1712-0101-1170	PANEL HOLDER_L (VX32L_LG)	1
31			1712-0101-1180	PANEL HOLDER_R (VX32L_LG)	1
32			1712-0400-1920	HEAT SINK (VX37L HDTV)	1
33			1720-0003-0620	MAC. SCREW-MB M3.0*6.0L,Ni	20
34			1720-0004-1020	MAC. SCREW-MB M4.0*10.0L Ni	11
35			1720-1204-0820	MAC. SCREW-MPGW M4.0*8.0L,Ni	1
36			1720-1503-0620	MAC.SCREW-MPSWF M3.0*6.0L Ni	18
37			1720-1504-0820	MAC. SCREW-MPSWF M4.0*8.0L,NI	16
38			1720-3003-0820	MAC.SCREW-MF M3.0*8.0L,NI	2
39			1720-7344-0820	MAC. SCREW-MHSW #4-40*8.0L,Ni	2
40			1721-0003-0820	TAP. SCREW-TB #3.0*8.0L,NI	11
41			1721-0004-0820	TAP. SCREW-TP #4.0*8.0L,NI	15
42			1721-0004-1050	TAP. SCREW-TP #4.0*10.0L, BLK-Ni	6
43			1721-0004-1650	TAP. SCREW-TP #4.0*16.0L, BLK-Ni	8

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
44			1721-0045-1020	TAP. SCREW-TP #4.5*10.0L, Ni	2
45			1721-3003-0920	TAP. SCREW-MF M3.0*9.0L, Ni	2
46			1721-4104-1220	TAP. SCREW-TRF #4.0*12.0L,Ni	6
47			1801-0124-3011	FRONT BEZEL (VX32L)(ABS, Piano Black) ASS'Y	1
48			1801-0214-9010	REAR COVER (VX32L)(ABS,SONY White) ASS'Y	1
49			1801-0524-3010	BASE (VX37L HDTV)(ABS) ASS'Y	1
50			1947-1200-0310	ACETATE CLOTH TAPE ( 醋酸布膠帶 ) 27*75mm	1
51			1947-1200-0400	ACETATE CLOTH TAPE ( 醋酸布膠帶 ) 20*45mm	21
52			1947-1200-0820	ACETATE CLOTH TAPE ( 醋酸布膠帶 ) 60*45mm	1
53			1947-1200-3680	ACETATE CLOTH TAPE ( 醋酸布膠帶 ) 40*80mm	1
54			1947-1200-3870	MYLAR (18.0*28.0*0.6t)(VX32L)	1
55			1947-1200-3900	SPONGE (22.0L*55.0W*0.6t)	6
56			1947-1700-0130	SHIELDING AL.TAPE (70.0*50.0)	1
57			1947-1700-0550	SHIELDING AL. TAPE (100.L*45.0W*0.15T)	1
58			1947-1800-0030	GASKET BLOCK (10W*17H*60L)	6
59			1947-1800-0080	GASKET BLOCK (17*34*25mm) (773GT)	2
60			1947-1800-0460	GASKET BLOCK (3.0H*10.0W*100.0L mm)	2
61			1947-1900-0030	HEATPATH (25x14mm)	1
62			3632-0012-0156	DISPLAY BD ASS'Y VX32L HDTV	1
63			3632-0022-0146	CONNECTOR BD ASS'Y VX32L HDTV	1
64			3632-0062-0150	MAIN BD ASS'Y VX32L HDTV_LG (HDCP)	1
65			3642-0022-0189	IR BD ASS'Y GV42L HDTV	1

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3632-0012-0156    DISPLAY BD ASS'Y VX32L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			363200120156M	DISPLAY BD ASS'Y VX32L HDTV MI	1
2			363200120156S	DISPLAY BD ASS'Y VX32L HDTV SMD	1

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3632-0022-0146 CONNECTOR BD ASS'Y VX32L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			0171-3871-0171	PCB CONN. BD FR4 80*22*1.6t D (VX32L HDTV)(1:10)	1
2		JC1	0451-2000-1266	WAFER 2.0mm 12P 90' DIP KINK (M242612R) L-F	1
3		JC2	0300-3041-0090	S-VIDEO 4PIN 90' (2MJ-0602-005) L-F	1
4		JC3	0302-9030-0114	RCA JACK 1ROW 3I/O (Y-W-R) L-F	1
5		LC1	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF	1

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### 3632-0022-0393 ACCESSARY ASS'Y VX32L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			0320-4000-0142	POWER CORD 110V UL/CSA 1800mm BLK N.M. (VINC)	1
2			0321-0000-0411	AV CABLE RCA(Y/W/R) 1800mm BLK (VINC)	1
3			0602-3000-0020	Battery Zn-Carbon 1.5V AA	2
4			0980-0303-5020	REMOTE CONTROL 66700BA0-010-R LF	1
5			1925-1100-0230	PE BAG 320*230*0.04T	2
6			1925-1100-0280	PE BAG (180W*290L*0.04t)(PE-LD)(ACC.-1)	1
7			1925-1200-7080	ACCESSARY BOX (330W*230D*50H)	1
8			1925-1300-7080	Brochure VIZIO Series	1
9			1925-1300-7980	Quick Setup Guide VIZIO VX32L HDTV	1
10			1925-1300-7990	MANUAL VIZIO VX32L HDTV	1
11			1925-1400-2710	Register CARD/VIZIO L15	1
12			1925-2000-0030	Polishing Cloth VIZIO P42 HDTV10A	1

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3632-0062-0150 MAIN BD ASS'Y VX32L HDTV\_LG (HDCP)

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			363200620150A	MAIN BD ASS'Y VX32L HDTV LG AI	1
2			363200620150M	MAIN BD ASS'Y VX32L HDTV_LG MI	1
3			363200620150S	MAIN BD ASS'Y VX32L HDTV_LG SMD	1

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3642-0022-0189 IR BD ASS'Y GV42L HDTV

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			364200220189M	IR BD ASS'Y GV42L HDTV MI	1
2			364200220189S	IR BD ASS'Y GV42L HDTV SMD	1



## 363200120156M DISPLAY BD ASS'Y VX32L HDTV MI

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1		CON1	0451-1250-1066	WAFER 1.25mm 10P 90' DIP KINK (M240110R) L-F	1
2	SS		0451-1250-1063	WAFER 1.25mm 10P 90' KINK (A1251WR0-10P) L-F	
3		CON3	0451-1250-0366	WAFER 1.25mm 3P 90' DIP KINK (M24013R) L-F	1
4	SS		0451-1250-0363	WAFER 1.25mm 3P 90' KINK (A1251WR0-3P) L-F	
5		J2	0451-2000-0466	WAFER 2.0mm 4P 90' DIP KINK (M24264R) L-F	1
6	SS		0451-2003-0463	WAFER 2.00mm 4P 90' KINK (A2001WR2-4P) L-F	
7		SW1	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
8		SW2	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
9		SW3	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
10		SW4	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
11		SW5	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
12		SW6	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
13		SW7	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1

## 363200120156S DISPLAY BD ASS'Y VX32L HDTV SMD

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			0174-1770-1791	PCB DISPLAY BD K1 150*25*1.6t (VX32L HDTV)(1:10)	1
2		CD1	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
3	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
4		CD2	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
5	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
6		CD3	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
7	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
8		CD4	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
9	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
10		RD1	0130-0000-1859	RES. CF 0.0ohm 1/8W J 1206	1
11		RD10	0130-0000-1859	RES. CF 0.0ohm 1/8W J 1206	1
12		RD11	0130-2001-1654	RES CF 2Kohm 1/16W J 0402	1
13		RD12	0130-2001-1654	RES CF 2Kohm 1/16W J 0402	1
14		RD13	0130-2001-1654	RES CF 2Kohm 1/16W J 0402	1
15		RD14	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
16		RD15	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
17		RD16	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
18		RD17	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
19		RD2	0130-2401-1654	RES. CF 2.4 Kohm 1/16W J 0402	1
20		RD3	0130-2001-1654	RES CF 2Kohm 1/16W J 0402	1
21		RD4	0130-2001-1654	RES CF 2Kohm 1/16W J 0402	1
22		RD5	0130-2001-1654	RES CF 2Kohm 1/16W J 0402	1
23		RD6	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
24		RD7	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
25		RD8	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1

## 363200620150A MAIN BD ASS'Y VX32L HDTV\_LG AI

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1		CE1	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
2		CE10	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
3		CE11	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
4		CE12	0103-6471-1312	E/C HF 470uF 25V 105°C (10*16mm)	1
5		CE13	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
6		CE14	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
7		CE15	0103-6471-1312	E/C HF 470uF 25V 105°C (10*16mm)	1
8		CE16	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
9		CE17	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
10		CE18	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
11		CE19	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
12		CE2	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
13		CE20	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
14		CE21	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
15		CE22	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
16		CE23	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
17		CE24	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
18		CE25	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
19		CE26	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
20		CE27	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
21		CE3	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
22		CE31	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
23		CE32	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
24		CE33	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
25		CE34	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
26		CE35	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
27		CE36	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
28		CE37	0103-1471-1211	E/C VZ 470uF 16V 105°C F-T (8*11.5mm)	1
29		CE38	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
30		CE4	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
31		CE40	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
32		CE41	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
33		CE42	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
34		CE43	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
35		CE44	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
36		CE45	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
37		CE46	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
38		CE47	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
39		CE48	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
40		CE49	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
41		CE5	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
42		CE50	0103-1471-1211	E/C VZ 470uF 16V 105°C F-T (8*11.5mm)	1
43		CE51	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
44		CE52	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
45		CE53	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
46		CE54	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
47		CE55	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
48		CE56	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
49		CE57	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
50		CE58	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
51		CE59	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
52		CE6	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
53		CE60	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
54		CE62	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
55		CE64	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
56		CE65	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
57		CE66	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
58		CE67	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
59		CE7	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
60		CE72	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
61		CE75	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
62		CE78	0230-5008-0000	JUMPER WIRE 5.0*0.6MM	1
63		CE79	0230-5008-0000	JUMPER WIRE 5.0*0.6MM	1
64		CE8	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
65		CE81	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
66		CE82	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
67		CE83	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
68		CE84	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
69		CE87	0103-6102-1212	E/C HF 1000uF 16V 105°C F (10*20)	1
70	SS		0103-6102-1210	E/C HF 1000uF 16V 105°C N-F (10*20)	
71		CE88	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
72		CE89	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
73		CE9	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
74		CE90	0103-1220-1511	E/C VT 22uF 50V 105°C F-T (5*11mm)	1
75		CE91	0103-1221-1311	E/C VT 220uF 25V 105°C F-T (8*11.5mm)	1
76		C159	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
77		C160	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
78		C161	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1
79		C33	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
80		C34	0103-1101-1211	E/C VZ 100uF 16V 105°C F-T (5*11mm)	1
81		C38	0103-1100-1511	E/C VT 10uF 50V 105°C F-T (5*11mm)	1

# 363200620150M MAIN BD ASS'Y VX32L HDTV\_LG MI

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1		J1	0451-2000-1366	WAFER 2.0mm 13P 90' DIP KINK (M242613R) L-F	1
2	SS		0451-2003-1363	WAFER 2.00mm 13P 90' KINK (A2001WR2-13P) L-F	
3		J2	0451-1250-1066	WAFER 1.25mm 10P 90' DIP KINK (M240110R) L-F	1
4	SS		0451-1250-1063	WAFER 1.25mm 10P 90' KINK (A1251WR0-10P) L-F	
5		J4	0451-2000-1266	WAFER 2.0mm 12P 90' DIP KINK (M242612R) L-F	1
6	SS		0451-2003-1263	WAFER 2.00mm 12P 90' KINK (A2001WR2-12P) L-F	
7		J6	0451-2500-0446	WAFER 2.5mm 4P 90' DIP KINK (M241854R) L-F	1
8	SS		0451-2500-0443	WAFER 2.50mm 4P 90' KINK (A2501WR2-4P) L-F	
9		L11	0361-2022-0030	COIL CHOKE 22UH 2.9A 11*12 DIP	1
10		L68	0370-0000-1011	FERRITE CORE RH 3.5X6X1.0(W)X2 L-F	1
11		L8	0361-2022-0030	COIL CHOKE 22UH 2.9A 11*12 DIP	1
12		P1	0302-9060-0020	RCA JACK 2ROW 6I/O (G-B-R)	1
13		P10	0300-6400-0031	OPTO CONN. Transmitter (134-0029-399A) L-F	1
14		P11	0302-9030-0114	RCA JACK 1ROW 3I/O (Y-W-R) L-F	1
15		P2	0302-9040-0010	RCA JACK 2ROW 4I/O 90' (W-R) L-F	1
16		P3	0300-1205-3151	D-SUB FEMALE 90' 15P 3ROW (DV11201-H5R6-4F) L-F	1
17		P4	0302-0350-0012	PHONE JACK 3.5 $\phi$ 5P 90' +SHIELD L-F	1
18		P5	0202-6000-0003	RJ11 6P6C Gray UNDER CONTACT L-F	1
19		P8	0302-9020-0114	RCA JACK 2ROW 2I/O (W-R) L-F	1
20		P9	0302-9020-0114	RCA JACK 2ROW 2I/O (W-R) L-F	1
21		SW1	0220-7020-0130	SW TACT 6*6mm 180' 160g SFKHHAM2525 L-F	1
22		U12	0980-0103-3060	MODULE TUNER DTVS205CH201A L-F	1
23		U3	0430-6011-3210	IC MC7805CTG 3PIN TO-220 LF	1
24	SS		0430-6011-3204	IC LM7805CT TO-220 3PIN LF	
25		U31	0430-4013-3109	IC TDA8946AJ 17PIN DIP LF	1
26		Y1	0280-2500-0012	X'TAL 25MHZ 49/US 30PPM 20PF LF	1

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363200620150S MAIN BD ASS'Y VX32L HDTV\_LG SMD

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			363200620150B	MAIN BD ASS'Y VX32L HDTV LG SMD BOT	1
2			363200620150T	MAIN BD ASS'Y VX32L HDTV_LG SMD TOP	1

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364200220189M IR BD ASS'Y GV42L HDTV MI

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1		JR1	0451-2000-0466	WAFER 2.0mm 4P 90' DIP KINK (M24264R) L-F	1
2	SS		0451-2003-0463	WAFER 2.00mm 4P 90' KINK (A2001WR2-4P) L-F	
3		UR1	0980-0200-2130	MODULE. IR RECEIVER (FM-6038LM-5AN)	1
4		UR1S	1701-1500-0360	IR HOLDER (TM-15A)	1

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## 364200220189S IR BD ASS'Y GV42L HDTV SMD

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			0171-1671-0501	PCB IR BD FR4 66.5*12*1.6t D (GV42L HDTV)(1:20)	1
2		CR2	0111-3106-1614	C/M Multi. 10uF 16V X7R K 1206	1
3	SS		0111-3106-1114	C/M MULTI 10uF 10V X7R K 1206	
4	SS		0112-3106-1614	C/M MULTI 10uF 16V X7R 1206	
5	SS		0115-7106-1614	C/M MULTI 10uF 16V X7R 1206	
6		CR3	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
7	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
8		LR1	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
9		RR1	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1
10		RR2	0130-4709-1654	RES. CF 47ohm 1/16W J 0402	1



# 363200620150B MAIN BD ASS'Y VX32L HDTV\_LG SMD BOT

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1		CB100	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
2	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
3		CB101	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
4	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
5		CB102	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
6	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
7		CB103	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
8	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
9		CB104	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
10	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
11		CB105	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
12	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
13		CB106	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
14	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
15		CB107	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
16	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
17		CB108	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
18	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
19		CB109	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
20	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
21		CB111	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
22	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
23		CB112	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
24	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
25		CB113	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
26	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
27		CB114	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
28	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
29		CB115	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
30	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
31		CB116	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
32	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
33		CB117	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
34	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
35		CB118	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
36	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
37		CB119	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
38	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
39		CB12	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
40	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
41		CB126	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
42	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
43		CB13	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
44	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
45		CB130	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
46	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
47		CB136	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
48	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
49		CB137	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
50	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
51		CB138	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
52	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
53		CB139	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
54	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
55		CB14	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
56	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
57		CB140	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
58	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
59		CB141	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
60	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
61		CB142	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
62	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
63		CB144	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
64	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
65		CB145	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
66	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
67		CB146	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
68	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
69		CB147	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
70	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
71		CB148	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
72	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
73		CB149	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
74	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
75		CB150	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
76	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
77		CB151	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
78	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
79		CB152	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
80	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
81		CB153	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
82	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
83		CB154	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
84	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
85		CB156	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
86	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
87		CB157	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
88	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
89		CB158	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
90	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
91		CB159	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
92	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
93		CB160	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
94	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
95		CB161	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
96	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
97		CB162	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
98	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
99		CB163	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
100	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
101		CB164	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
102	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
103		CB165	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
104	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
105		CB166	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
106	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
107		CB167	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
108	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
109		CB168	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
110	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
111		CB170	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
112	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
113		CB175	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
114	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
115		CB212	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
116	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
117		CB213	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
118	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
119		CB214	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
120	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
121		CB215	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
122	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
123		CB216	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
124	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
125		CB217	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
126	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
127		CB218	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
128	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
129		CB219	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
130	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
131		CB220	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
132	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
133		CB221	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
134	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
135		CB222	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
136	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
137		CB223	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
138	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
139		CB232	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
140	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
141		CB233	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
142	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
143		CB234	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
144	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
145		CB235	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
146	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
147		CB240	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
148	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
149		CB241	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
150	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
151		CB242	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
152	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
153		CB243	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
154	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
155		CB244	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
156	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
157		CB245	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
158	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
159		CB246	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
160	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
161		CB39	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
162	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
163		CB40	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
164	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
165		CB46	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
166	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
167		CB47	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
168	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
169		CB48	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
170	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
171		CB49	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
172	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
173		CB50	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
174	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
175		CB51	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
176	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
177		CB52	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
178	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
179		CB53	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
180	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
181		CB54	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
182	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
183		CB57	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
184	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
185		CB58	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
186	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
187		CB59	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
188	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
189		CB60	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
190	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
191		CB61	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
192	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
193		CB62	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
194	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
195		CB63	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
196	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
197		CB64	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
198	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
199		CB65	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
200	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
201		CB66	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
202	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
203		CB67	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
204	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
205		CB68	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
206	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
207		CB70	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
208	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
209		CB71	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
210	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
211		CB72	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
212	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
213		CB73	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
214	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
215		CB75	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
216	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
217		CB77	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
218	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
219		CB78	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
220	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
221		CB79	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
222	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
223		CB82	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
224	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
225		CB83	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
226	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
227		CB84	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
228	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
229		CB85	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
230	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
231		CB86	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
232	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
233		CB87	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
234	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
235		CB90	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
236	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
237		CB93	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
238	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
239		CB94	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
240	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
241		CB95	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
242	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
243		CB97	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
244	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
245		CB98	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
246	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
247		C132	0111-3106-1114	C/M MULTI 10uF 10V X7R K 1206	1
248	SS		0112-3106-1114	C/M Multi. 10UF 10V X7R 1206	
249		C20	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
250	SS		0112-3104-5166	C/M Multl. 0.1uF 50V X7R J 0603	
251		C23	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
252	SS		0112-3104-5166	C/M Multl. 0.1uF 50V X7R J 0603	
253		C26	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
254	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
255		C27	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
256	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
257		C28	0111-3106-1114	C/M MULTI 10uF 10V X7R K 1206	1
258	SS		0112-3106-1114	C/M Multi. 10UF 10V X7R 1206	
259		C31	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
260	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
261		D10	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
262	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
263	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
264		L13	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
265		L30	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
266		L33	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
267		L38	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
268		L42	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
269		L43	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
270		L49	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
271		R100	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
272		R101	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
273		R102	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
274		R226	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
275		R227	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
276		R228	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
277		R229	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
278		R230	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
279		R231	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
280		R232	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
281		R233	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
282		R390	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
283		R391	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402	1
284		R397	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
285		R398	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
286		R399	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
287		R400	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
288		R401	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
289		R402	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
290		R403	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
291		R404	0130-2000-1654	RES. CF 200ohm 1/16W J 0402	1
292		R407	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1

## 363200620150T MAIN BD ASS'Y VX32L HDTV\_LG SMD TOP

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
1			0171-2272-2173	PCB MAIN BD FR4 340*140*1.6t 4M (VX32L HDTV)(1:1)	1
2		CB1	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
3	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
4		CB110	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
5	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
6		CB120	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
7	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
8		CB121	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
9	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
10		CB122	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
11	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
12		CB123	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
13	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
14		CB124	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
15	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
16		CB125	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
17	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
18		CB127	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
19	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
20		CB128	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
21	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
22		CB129	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
23	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
24		CB131	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
25	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
26		CB132	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
27	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
28		CB133	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
29	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
30		CB134	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
31	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
32		CB135	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
33	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
34		CB143	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
35	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
36		CB15	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
37	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
38		CB155	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
39	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
40		CB16	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
41	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
42		CB169	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
43	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	



ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
44		CB17	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
45	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
46		CB171	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
47	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
48		CB172	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
49	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
50		CB173	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
51	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
52		CB174	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
53	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
54		CB176	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
55	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
56		CB177	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
57	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
58		CB178	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
59	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
60		CB179	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
61	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
62		CB18	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
63	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
64		CB180	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
65	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
66		CB181	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
67	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
68		CB183	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
69	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
70		CB184	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
71	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
72		CB185	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
73	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
74		CB186	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
75	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
76		CB187	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
77	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
78		CB188	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
79	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
80		CB189	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
81	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
82		CB19	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
83	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
84		CB190	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
85	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
86		CB191	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
87	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
88		CB192	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
89	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
90		CB193	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
91	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
92		CB194	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
93	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
94		CB195	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
95	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
96		CB196	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
97	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
98		CB197	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
99	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
100		CB198	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
101	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
102		CB199	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
103	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
104		CB2	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
105	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
106		CB20	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
107	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
108		CB200	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
109	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
110		CB201	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
111	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
112		CB202	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
113	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
114		CB203	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
115	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
116		CB204	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
117	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
118		CB205	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
119	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
120		CB206	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
121	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
122		CB207	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
123	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
124		CB208	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
125	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
126		CB209	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
127	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
128		CB21	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
129	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
130		CB210	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
131	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
132		CB211	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
133	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
134		CB22	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
135	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
136		CB224	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
137	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
138		CB225	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
139	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
140		CB226	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
141	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
142		CB227	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
143	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
144		CB228	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
145	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
146		CB229	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
147	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
148		CB23	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
149	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
150		CB230	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
151	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
152		CB231	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
153	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
154		CB236	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
155	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
156		CB237	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
157	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
158		CB238	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
159	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
160		CB239	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
161	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
162		CB24	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
163	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
164		CB247	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
165	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
166		CB248	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
167	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
168		CB25	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
169	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
170		CB26	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
171	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
172		CB27	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
173	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
174		CB28	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
175	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
176		CB29	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
177	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
178		CB3	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
179	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
180		CB30	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
181	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
182		CB31	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
183	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
184		CB32	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
185	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
186		CB33	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
187	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
188		CB34	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
189	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
190		CB35	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
191	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
192		CB36	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
193	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
194		CB37	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
195	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
196		CB38	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
197	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
198		CB4	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
199	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
200		CB41	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
201	SS		0112-3104-5166	C/M Multi. 0.1uF 50V X7R J 0603	
202		CB42	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
203	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
204		CB43	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
205	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
206		CB44	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
207	SS		0112-3104-5166	C/M Multi. 0.1uF 50V X7R J 0603	
208		CB45	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
209	SS		0112-3104-5166	C/M Multi. 0.1uF 50V X7R J 0603	
210		CB5	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
211	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
212		CB55	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
213	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
214		CB56	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
215	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
216		CB69	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
217	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
218		CB74	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
219	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
220		CB76	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
221	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
222		CB80	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
223	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
224		CB81	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
225	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
226		CB88	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
227	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
228		CB89	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
229	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
230		CB96	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
231	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
232		CB99	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
233	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
234		C1	0111-3105-1615	C/M MULTI. 1.0uF 16V X7R 0805	1
235	SS		0112-3105-1615	C/M MULTI 1.0uF 16V X7R 0805	
236		C10	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
237	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
238		C100	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
239	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
240		C101	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
241	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
242		C104	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
243	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
244		C105	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
245	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
246		C106	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
247	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
248		C107	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
249	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
250		C111	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
251	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
252		C116	0111-3472-5117	C/M Multi. 4700PF 50V X7R K 0402	1
253	SS		0112-3472-5117	C/M Multi. 4700PF 50V X7R K 0402 L-F	
254		C117	0111-3472-5117	C/M Multi. 4700PF 50V X7R K 0402	1
255	SS		0112-3472-5117	C/M Multi. 4700PF 50V X7R K 0402 L-F	
256		C118	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
257	SS		0112-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603 L-F	
258		C119	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
259	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
260		C121	0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
261	SS		0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
262		C122	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
263	SS		0112-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603 L-F	
264		C123	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
265	SS		0112-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603 L-F	
266		C124	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
267	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
268		C126	0111-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603	1
269	SS		0112-3474-1636	C/M Multi. 0.47uF 16V Y5V 0603 L-F	
270		C127	0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
271	SS		0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
272		C128	0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
273	SS		0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
274		C129	0111-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	1
275	SS		0112-3224-2516	C/M Multi. 0.22uF 25V X7R 0603	
276		C13	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
277	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
278		C130	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
279	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
280		C131	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
281	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
282		C14	0111-3569-5107	C/M Multi. 5.6pF 50V NPO 0402	1
283	SS		0112-3569-5107	C/M Multi. 5.6pF 50V NPO 0402	
284		C15	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
285	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
286		C157	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
287	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
288		C158	0111-3106-1114	C/M MULTI 10uF 10V X7R K 1206	1
289	SS		0112-3106-1114	C/M Multi. 10UF 10V X7R 1206	
290		C16	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
291	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
292		C164	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
293	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
294		C17	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
295	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
296		C19	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
297	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
298		C2	0111-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	1
299	SS		0112-3104-1617	C/M Multi. 0.1uF 16V X7R 0402	
300		C21	0111-3104-5166	C/M MULTI 0.1UF 50V X7R J 0603	1
301	SS		0112-3104-5166	C/M Multi. 0.1uF 50V X7R J 0603	
302		C22	0111-3106-1114	C/M MULTI 10uF 10V X7R K 1206	1
303	SS		0112-3106-1114	C/M Multi. 10UF 10V X7R 1206	
304		C24	0111-3180-5107	C/M Multi. 18PF 50V NPO 0402	1
305	SS		0112-3180-5107	C/M Multi. 18PF 50V NPO 0402	
306		C25	0111-3180-5107	C/M Multi. 18PF 50V NPO 0402	1
307	SS		0112-3180-5107	C/M Multi. 18PF 50V NPO 0402	
308		C29	0111-3106-1114	C/M MULTI 10uF 10V X7R K 1206	1
309	SS		0112-3106-1114	C/M Multi. 10UF 10V X7R 1206	
310		C30	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
311	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
312		C32	0111-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	1
313	SS		0112-3475-1135	C/M MULTI 4.7uF 10V Y5V 0805	
314		C37	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
315	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
316		C40	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
317	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
318		C41	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
319	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
320		C42	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
321	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
322		C44	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
323	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
324		C46	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
325	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
326		C47	0111-3220-5107	C/M Multi. 22PF 50V NPO J 0402	1
327	SS		0112-3220-5107	C/M Multi. 22PF 50V NPO J 0402	
328		C48	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
329	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
330		C49	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
331	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
332		C50	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
333	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
334		C51	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
335	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
336		C52	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
337	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
338		C53	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
339	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
340		C56	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
341	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
342		C57	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
343	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
344		C58	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
345	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
346		C59	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
347	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
348		C6	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
349	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
350		C60	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
351	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
352		C61	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
353	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
354		C62	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
355	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
356		C63	0111-3470-5107	C/M Multi. 47pF 50V NPO 0402	1
357	SS		0112-3470-5107	C/M Multi. 47PF 50V NPO J 0402	
358		C64	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
359	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
360		C65	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
361	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
362		C66	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
363	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
364		C67	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
365	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
366		C68	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
367	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
368		C69	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
369	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
370		C70	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
371	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
372		C71	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
373	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
374		C72	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
375	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
376		C73	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
377	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
378		C74	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
379	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
380		C75	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
381	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
382		C76	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
383	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
384		C77	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
385	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
386		C78	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
387	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
388		C79	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
389	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
390		C80	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
391	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
392		C81	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
393	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
394		C82	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
395	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
396		C83	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
397	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
398		C84	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
399	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
400		C85	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
401	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
402		C86	0111-3150-5107	C/M Multi. 15PF 50V NPO 0402	1
403	SS		0112-3150-5107	C/M Multi. 15PF 50V NPO 0402	
404		C87	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
405	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
406		C88	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
407	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
408		C89	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
409	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
410		C9	0111-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	1
411	SS		0112-3473-2517	C/M Multi. 0.047uF 25V X7R 0402	
412		C90	0111-3509-5107	C/M Multi. 5PF 50V NPO 0402	1
413	SS		0112-3509-5107	C/M Multi. 5PF 50V COG 0402 L-F	
414		C91	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
415	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
416		C92	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
417	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
418		C93	0111-3509-5107	C/M Multi. 5PF 50V NPO 0402	1
419	SS		0112-3509-5107	C/M Multi. 5PF 50V COG 0402 L-F	



ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
420		C94	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
421	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
422		C95	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
423	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
424		C96	0111-3509-5107	C/M Multi. 5PF 50V NPO 0402	1
425	SS		0112-3509-5107	C/M Multi. 5PF 50V COG 0402 L-F	
426		C97	0111-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	1
427	SS		0112-3103-1617	C/M Multi. 0.01uF 16V X7R K 0402	
428		C98	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
429	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
430		C99	0111-3102-5117	C/M MULTI 1000PF 50V X7R 0402	1
431	SS		0112-3102-5117	C/M Multi. 1000PF 50V X7R 0402	
432		D1	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
433	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
434	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
435		D13	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
436	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
437	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
438		D14	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
439	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
440	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
441		D30	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
442	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
443	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
444		D32	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
445	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
446	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
447		D4	0390-6005-5293	SCHOTTKY DIODE 3A 40V B340A-13-F SMA L-F	1
448		D42	0390-6005-5293	SCHOTTKY DIODE 3A 40V B340A-13-F SMA L-F	1
449		D45	0390-6005-5293	SCHOTTKY DIODE 3A 40V B340A-13-F SMA L-F	1
450		D5	0390-6005-2103	SCHOTTKY DIODE 0.5A/40V MBR0540T1G SOD-123 LF	1
451		D51	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
452	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
453	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
454		D52	0390-6005-5293	SCHOTTKY DIODE 3A 40V B340A-13-F SMA L-F	1
455		D9	0390-5004-2343	GEN. DIODE LL4148WP SMD 1206 L-F	1
456	SS		0390-3006-7353	DIODE FAST 0.3A 100V LL4148 LL-34 LF	
457	SS		0390-5004-2223	GEN. DIODE RLS4148NTE-11 SMD L-F	
458		F1	0185-1302-0073	FUSE 125V/3A SMD (R451003) LF	1
459		F2	0185-1302-0073	FUSE 125V/3A SMD (R451003) LF	1
460		J7	0302-2000-1301	CONN MALE R/A 30P SMD DF14-30P-1.25H(26) L-F	1
461	SS		0302-2000-1306	CONN MALE R/A 30P SMD (MS240430) L-F	
462		L10	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
463		L12	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
464		L14	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
465		L16	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
466		L21	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
467		L22	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
468		L26	0360-1000-0420	POWER INDUCTOR L:10uH 1.44A 5.8x5.2mm SMD LF	1
469		L28	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
470		L29	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
471		L31	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
472		L32	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
473		L34	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
474		L35	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
475		L36	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
476		L37	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
477		L39	0360-1000-0430	POWER INDUCTOR L:150uH 400mA 5.8x5.2mm SMD LF	1
478		L4	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
479		L40	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
480		L41	0360-1000-0430	POWER INDUCTOR L:150uH 400mA 5.8x5.2mm SMD LF	1
481		L44	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
482		L5	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
483		L50	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
484		L51	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
485		L52	0370-2022-9620	CHIP COIL 2.2uH 15mA 0603 LF (MLF1608A2R2KT)	1
486		L53	0370-2022-9620	CHIP COIL 2.2uH 15mA 0603 LF (MLF1608A2R2KT)	1
487		L54	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
488		L55	0130-2709-1858	RES. CF 27ohm 1/8W J 0805	1
489		L56	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
490		L58	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
491		L6	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
492		L60	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
493		L61	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
494		L63	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
495		L64	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
496		L67	0370-0000-6452	CHIP BEAD CORE 80ohm (MLB-201209-0080A-N2)	1
497		L7	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
498		L74	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805	1
499		L9	0370-0001-4282	CHIP BEAD 80ohm 6A 0805 (GB201212K800TM) LF	1
500		P6	0304-1000-0113	CONN HDMI 19P 90' SMD With Flange (392M19-H58) L-F	1
501		P7	0304-1000-0113	CONN HDMI 19P 90' SMD With Flange (392M19-H58) L-F	1
502		QF3	0420-2005-8635	MOSFET 3.6A 30V AM2343P-T1-PF SOT-23 3PIN LF	1
503		Q1	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
504	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
505		Q10	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
506	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
507		Q11	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
508	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
509		Q12	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1
510	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
511		Q13	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
512	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
513		Q14	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
514	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
515		Q15	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
516	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
517		Q16	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
518	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
519		Q17	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
520	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
521		Q18	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
522	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
523		Q19	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
524	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
525		Q2	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
526	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
527		Q21	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
528	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
529		Q22	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
530	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
531		Q23	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1
532	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
533		Q24	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
534	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
535		Q25	0410-5000-5710	TRANSISTOR MMBT3906LT1G SOT-23 L-F	1
536	SS		0410-5000-5711	TRANSISTOR PMBS3906 SMD LF	
537		Q26	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
538	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
539		Q3	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
540	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
541		Q4	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
542	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
543		Q5	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
544	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
545		Q8	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
546	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
547		Q9	0410-5000-5610	TRANSISTOR MMBT3904LT1G SOT-23 L-F	1
548	SS		0410-5000-5611	TRANSISTOR PMBS3904 SMD T LF	
549		RN10	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P	1
550		RN11	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
551		RN12	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
552		RN13	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
553		RN14	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
554		RN15	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
555		RN16	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
556		RN17	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
557		RN18	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
558		RN19	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P	1
559		RN20	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1
560		RN21	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P	1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
561	RN22	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P		1
562	RN23	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P		1
563	RN24	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P		1
564	RN25	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P		1
565	RN26	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P		1
566	RN27	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P		1
567	RN28	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P		1
568	RN29	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P		1
569	RN30	0141-4709-3851	ARRAY RES. A(X) 47ohm 4R J 8P		1
570	RN31	0141-7509-3851	ARRAY RES. A(X) 75ohm 4R J 8P		1
571	RN6	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P		1
572	RN7	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P		1
573	RN8	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P		1
574	RN9	0141-2209-3851	ARRAY RES. A(X) 22ohm 4R J 8P		1
575	RP23	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P		1
576	RP24	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P		1
577	RP3	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P		1
578	RP4	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P		1
579	RP5	0141-3309-3851	ARRAY RES. A(X) 33ohm 4R J 8P		1
580	R1	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
581	R10	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
582	R103	0130-5109-1654	RES. CF 51ohm 1/16W J 0402		1
583	R104	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
584	R106	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
585	R109	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
586	R11	0130-3302-1654	RES. CF 33Kohm 1/16W J 0402		1
587	R110	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
588	R112	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
589	R113	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
590	R114	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
591	R115	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
592	R116	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
593	R117	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
594	R118	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
595	R119	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
596	R12	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
597	R120	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
598	R121	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
599	R122	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
600	R123	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
601	R124	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
602	R125	0130-2209-1654	RES. CF 22ohm 1/16W J 0402		1
603	R126	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
604	R127	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
605	R128	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
606	R129	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
607	R13	0130-1800-1654	RES. CF 180ohm 1/16W J 0402		1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
608	R130	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
609	R131	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
610	R133	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
611	R134	0130-2209-1654	RES. CF 22ohm 1/16W J 0402		1
612	R135	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
613	R136	0130-2209-1654	RES. CF 22ohm 1/16W J 0402		1
614	R137	0130-2209-1654	RES. CF 22ohm 1/16W J 0402		1
615	R138	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
616	R139	0130-2209-1654	RES. CF 22ohm 1/16W J 0402		1
617	R14	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
618	R140	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
619	R141	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
620	R142	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
621	R143	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
622	R144	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
623	R145	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
624	R146	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
625	R147	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
626	R148	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
627	R15	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
628	R151	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
629	R152	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
630	R153	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
631	R154	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
632	R155	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
633	R156	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
634	R157	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
635	R158	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
636	R159	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
637	R16	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
638	R160	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
639	R161	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
640	R162	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
641	R163	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
642	R164	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
643	R165	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1
644	R166	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
645	R167	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
646	R168	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
647	R169	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
648	R17	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402		1
649	R170	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1
650	R171	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
651	R172	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
652	R173	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
653	R174	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
654	R175	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
655	R176	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
656	R177	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
657	R178	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
658	R179	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
659	R180	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1
660	R181	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
661	R182	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
662	R183	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
663	R184	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
664	R185	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1
665	R186	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
666	R187	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
667	R188	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
668	R189	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
669	R190	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1
670	R191	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
671	R192	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
672	R193	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
673	R194	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
674	R195	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1
675	R196	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
676	R197	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
677	R198	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
678	R199	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1
679	R2	0130-5600-1654	RES. CF 560ohm 1/16W J 0402		1
680	R20	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
681	R200	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
682	R201	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
683	R202	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
684	R203	0370-0001-4773	CHIP BEAD CORE 80ohm (MCB1608H800GA) LF		1
685	R204	0130-6809-1654	RES. CF 68 ohm 1/16W J 0402		1
686	R205	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
687	R206	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
688	R207	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
689	R208	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
690	R209	0131-5110-1614	RES. MF 511 ohm 1/16W F 0402		1
691	R21	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
692	R210	0130-2001-1654	RES CF 2Kohm 1/16W J 0402		1
693	R211	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
694	R212	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
695	R213	0131-5110-1614	RES. MF 511 ohm 1/16W F 0402		1
696	R214	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
697	R215	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
698	R216	0130-2001-1654	RES CF 2Kohm 1/16W J 0402		1
699	R217	0130-2002-1654	RES. CF 20Kohm 1/16W J 0402		1
700	R218	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
701	R220	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
702	R221	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
703	R222	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
704	R223	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
705	R224	0130-3300-1654	RES. CF 330ohm 1/16W J 0402		1
706	R225	0130-3300-1654	RES. CF 330ohm 1/16W J 0402		1
707	R23	0130-5600-1654	RES. CF 560ohm 1/16W J 0402		1
708	R235	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
709	R236	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
710	R237	0130-2002-1654	RES. CF 20Kohm 1/16W J 0402		1
711	R238	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
712	R239	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
713	R24	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
714	R241	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
715	R242	0130-1501-1654	RES. CF 1.5Kohm 1/16W J 0402		1
716	R243	0130-1801-1654	RES. CF 1.8Kohm 1/16W J 0402		1
717	R245	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
718	R246	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
719	R247	0130-2002-1654	RES. CF 20Kohm 1/16W J 0402		1
720	R248	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
721	R249	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
722	R251	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
723	R254	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
724	R255	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
725	R256	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
726	R257	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
727	R259	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
728	R26	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
729	R260	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
730	R261	0130-2002-1654	RES. CF 20Kohm 1/16W J 0402		1
731	R262	0130-2002-1654	RES. CF 20Kohm 1/16W J 0402		1
732	R263	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
733	R264	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
734	R265	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
735	R266	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
736	R267	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
737	R268	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
738	R269	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
739	R27	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
740	R270	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
741	R271	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
742	R272	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
743	R273	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
744	R274	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
745	R275	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
746	R276	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
747	R277	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
748	R278	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
749	R279	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
750	R28	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
751	R280	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
752	R281	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
753	R282	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
754	R283	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
755	R284	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
756	R285	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
757	R286	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
758	R287	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
759	R288	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
760	R289	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
761	R290	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
762	R293	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
763	R294	0130-6802-1654	RES. CF 68Kohm 1/16W J 0402		1
764	R295	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
765	R296	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
766	R298	0130-2702-1654	RES. CF 27Kohm 1/16W J 0402		1
767	R299	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
768	R3	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
769	R30	0130-1800-1654	RES. CF 180ohm 1/16W J 0402		1
770	R304	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
771	R307	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
772	R308	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
773	R309	0130-3001-1654	RES. CF 3 Kohm 1/16W J 0402		1
774	R31	0130-1100-1654	RES. CF 110ohm 1/16W J 0402		1
775	R310	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
776	R315	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
777	R317	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
778	R319	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
779	R32	0130-1100-1654	RES. CF 110ohm 1/16W J 0402		1
780	R320	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
781	R321	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
782	R322	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
783	R325	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
784	R326	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
785	R327	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
786	R329	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
787	R33	0130-1800-1654	RES. CF 180ohm 1/16W J 0402		1
788	R330	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
789	R331	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
790	R333	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
791	R334	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805		1
792	R335	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
793	R336	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
794	R337	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
795	R338	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805		1



ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
796	R34	0130-1100-1654	RES. CF 110ohm 1/16W J 0402		1
797	R340	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805		1
798	R341	0130-3908-1858	RES. CF 3.9ohm 1/8W J 0805		1
799	R342	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
800	R343	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
801	R344	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
802	R345	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
803	R346	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
804	R347	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
805	R35	0130-1201-1654	RES. CF 1.2Kohm 1/16W J 0402		1
806	R352	0130-0000-1858	RES. CF 0.0ohm 1/8W J 0805		1
807	R353	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
808	R354	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
809	R358	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402		1
810	R359	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
811	R36	0130-1800-1654	RES. CF 180ohm 1/16W J 0402		1
812	R360	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
813	R361	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
814	R362	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
815	R364	0130-7509-1654	RES. CF 75ohm 1/16W J 0402		1
816	R366	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
817	R367	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
818	R369	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
819	R37	0130-2001-1654	RES CF 2Kohm 1/16W J 0402		1
820	R370	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
821	R371	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
822	R372	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
823	R373	0130-2002-1654	RES. CF 20Kohm 1/16W J 0402		1
824	R375	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
825	R377	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
826	R378	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
827	R379	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
828	R38	0130-3001-1654	RES. CF 3 Kohm 1/16W J 0402		1
829	R380	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
830	R382	0112-3105-1157	C/M Multi. 1.0uF 10V X5R 0402		1
831	R383	0112-3105-1157	C/M Multi. 1.0uF 10V X5R 0402		1
832	R384	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
833	R385	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402		1
834	R386	0130-4703-1654	RES. CF 470Kohm 1/16W J 0402		1
835	R387	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
836	R39	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
837	R393	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
838	R394	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
839	R395	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
840	R396	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
841	R4	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
842	R40	0130-1100-1654	RES. CF 110ohm 1/16W J 0402		1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
843	R406	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
844	R408	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
845	R41	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402		1
846	R42	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
847	R43	0130-1200-1654	RES. CF 120ohm 1/16W J 0402		1
848	R44	0130-1100-1654	RES. CF 110ohm 1/16W J 0402		1
849	R45	0130-1800-1654	RES. CF 180ohm 1/16W J 0402		1
850	R46	0130-1100-1654	RES. CF 110ohm 1/16W J 0402		1
851	R47	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402		1
852	R48	0130-2209-1654	RES. CF 22ohm 1/16W J 0402		1
853	R49	0130-3001-1654	RES. CF 3 Kohm 1/16W J 0402		1
854	R5	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
855	R50	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
856	R51	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
857	R52	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
858	R53	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
859	R54	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
860	R55	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
861	R56	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
862	R57	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402		1
863	R58	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
864	R59	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
865	R60	0130-2203-1654	RES. CF 220Kohm 1/16W J 0402		1
866	R62	0130-1000-1654	RES. CF 100ohm 1/16W J 0402		1
867	R63	0130-0000-1654	RES. CF 0ohm 1/16W J 0402		1
868	R64	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
869	R65	0130-1003-1654	RES. CF 100Kohm 1/16W J 0402		1
870	R66	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
871	R68	0131-6341-1614	RES. MF 6.34 Kohm 1/16W F 0402		1
872	R69	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
873	R7	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
874	R70	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
875	R71	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
876	R72	0130-1004-1654	RES. CF 1Mohm 1/16W J 0402		1
877	R73	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
878	R74	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
879	R75	0130-1001-1654	RES. CF 1Kohm 1/16W J 0402		1
880	R78	0130-5600-1654	RES. CF 560ohm 1/16W J 0402		1
881	R8	0130-4702-1654	RES. CF 47Kohm 1/16W J 0402		1
882	R83	0130-4709-1654	RES. CF 47ohm 1/16W J 0402		1
883	R85	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
884	R86	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
885	R88	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
886	R9	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402		1
887	R91	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402		1
888	R92	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1
889	R93	0130-3309-1654	RES. CF 33ohm 1/16W J 0402		1

ITEM	M/S	LOCATION	PART NO.	DESCRIPTION	QTY
890		R94	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
891		R95	0130-1002-1654	RES. CF 10Kohm 1/16W J 0402	1
892		R96	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
893		R97	0130-4701-1654	RES. CF 4.7Kohm 1/16W J 0402	1
894		R98	0130-8201-1654	RES. CF 8.2Kohm 1/16W J 0402	1
895		R99	0130-0000-1654	RES. CF 0ohm 1/16W J 0402	1
896		U1	0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	1
897		U10	0430-6006-1079	IC LDO AP1084KLA ADJ TO-263-3L LF	1
898		U11	0430-1002-0015	IC CMOS SN74HC00DR SOIC 14PIN LF	1
899	SS		0430-1002-0009	IC CMOS 74HC00D SO14 LF	
900		U13	0430-7043-1999	IC DEMODULATOR MT5112BD LQFP 100PIN LF	1
901		U14	0430-7043-6999	IC SCALER MT5372AJ-L BGA 588PIN LF	1
902		U15	0430-6015-6099	IC RESET STL8110GCL438 4.38V SOT-23 3PIN LF	1
903		U16	0430-3039-4645	IC MX29LV320CTTC-70G 48PIN TSOP LF	1
904		U17	0430-3004-3011	IC AT24C16AN-10SU-2.7 SO-8 L-F	1
905		U18	0430-7031-9603	IC DDR 16Mx16 NT5DS16M16CS-5T 66PIN TSOPII LF	1
906		U19	0430-7031-9603	IC DDR 16Mx16 NT5DS16M16CS-5T 66PIN TSOPII LF	1
907		U2	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
908		U20	0430-6010-9028	IC G2996F1Uf 8PIN SOP-8(FD) LF	1
909		U21	0430-3039-6011	IC AT24C02BN-10SU-1.8 8Pin SOIC L-F	1
910		U22	0430-7044-1092	IC SWITCH PI3HDMI412FTZHE TQFN 42PIN LF	1
911		U23	0430-3039-6011	IC AT24C02BN-10SU-1.8 8Pin SOIC L-F	1
912		U24	0430-7043-5092	IC SWITCH PI5C3257QE QSOP 16PIN LF	1
913		U25	0430-3039-6011	IC AT24C02BN-10SU-1.8 8Pin SOIC L-F	1
914		U27	0430-0001-8015	IC CD4052BNSR 16PIN SOP16 L-F	1
915	SS		0430-0002-9086	IC CMOS 4052L-S16-R SOP 16PIN LF	
916		U28	0430-7027-3699	IC WM8776SEFT 48PIN TQFP L-F	1
917		U30	0430-7043-7099	IC AUDIO DAC WM8521HCGED SOIC 14PIN LF	1
918		U32	0420-1005-4601	POWER MOS IRF7316TRPBF SMD 8PIN LF	1
919		U33	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
920		U34	0430-6015-8079	IC DC/DC CONVERTER AP1522WA SOT23-5 5PIN LF	1
921		U4	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
922		U5	0430-6015-5079	IC STEP DOWN CONVERTER AP1513SA SOP 8PIN LF	1
923		U6	0430-6015-5079	IC STEP DOWN CONVERTER AP1513SA SOP 8PIN LF	1
924		U7	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
925		U8	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
926		U9	0430-6009-1051	IC AMC1117SKF-ADJ SMD 3PIN SOT-223 LF	1
927		X1	0286-2700-0024	OSC 27MHz 25ppm 3.3V SMD VCXO	1

CAM Products 2000(TM): top.art

AmTRAN Co., Ltd

0171-1671-0501

GV42L-R1.BRD

FR4 2L 1.6T

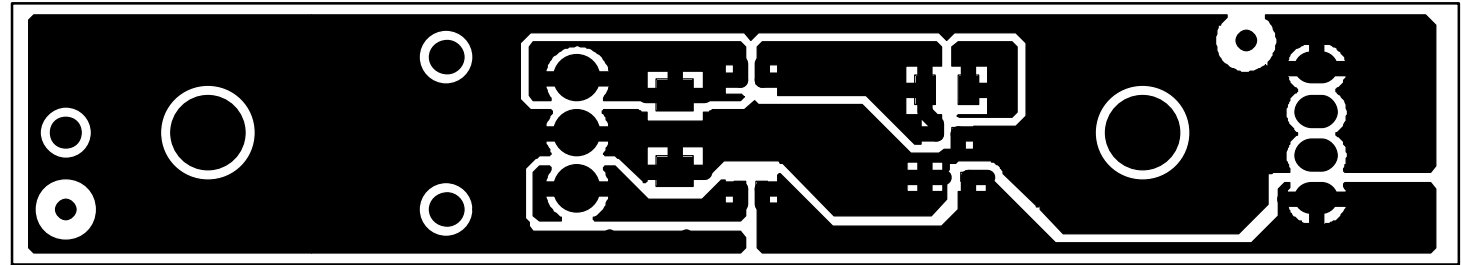
SIZE: 66.5x12mm

PNL.: 143x140mm

Q'TY: 05pn.( 100pcs )

REC.: 05-15-2006

O.S.P. S/M: Green



AmTRAN Co.,Ltd

0171-1671-0501

GV42L-R1.BRD

FR4 2L 1.6T

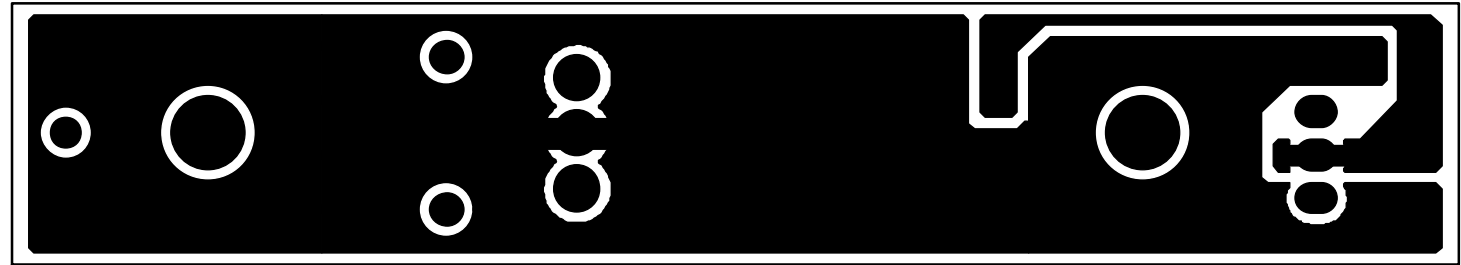
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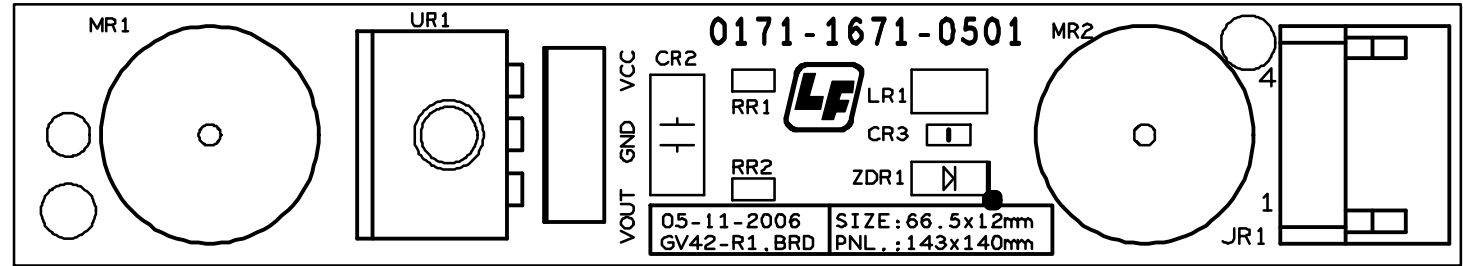
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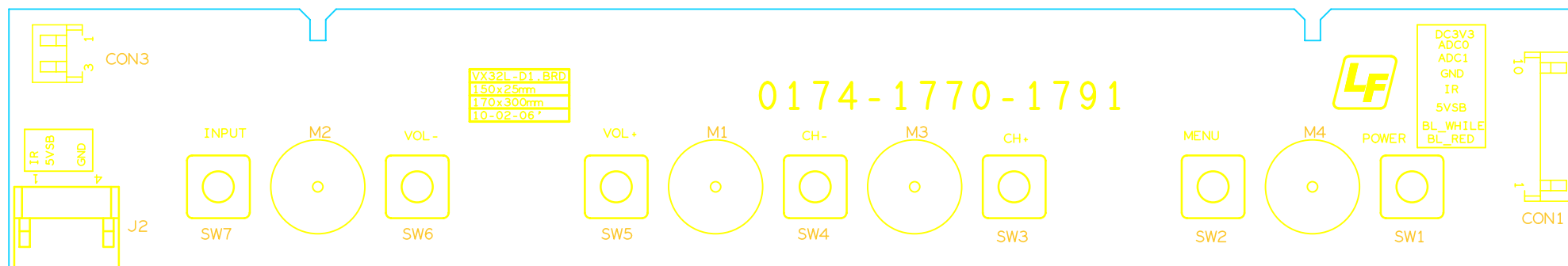
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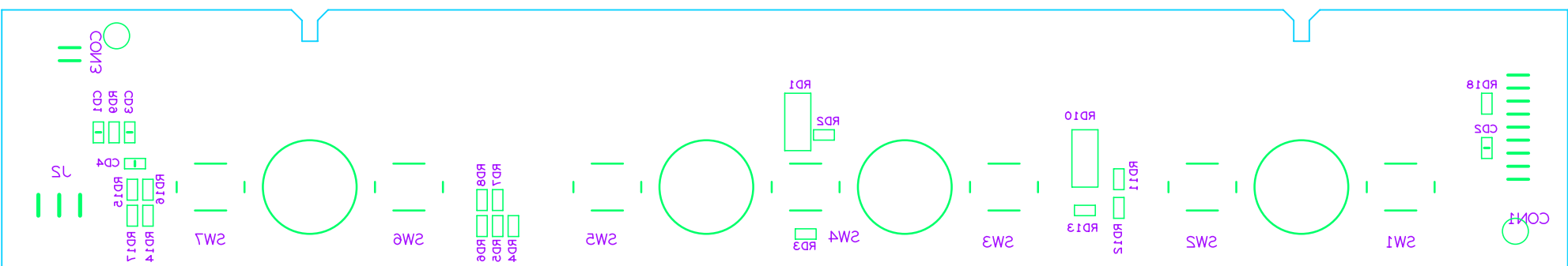
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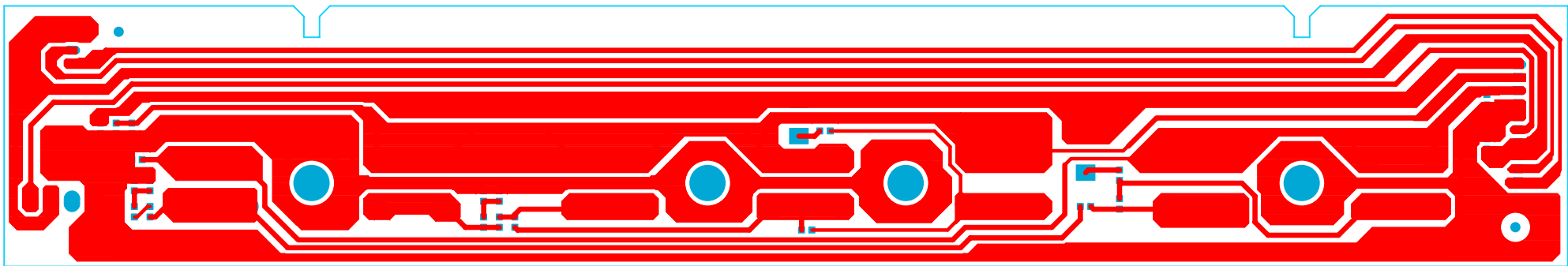
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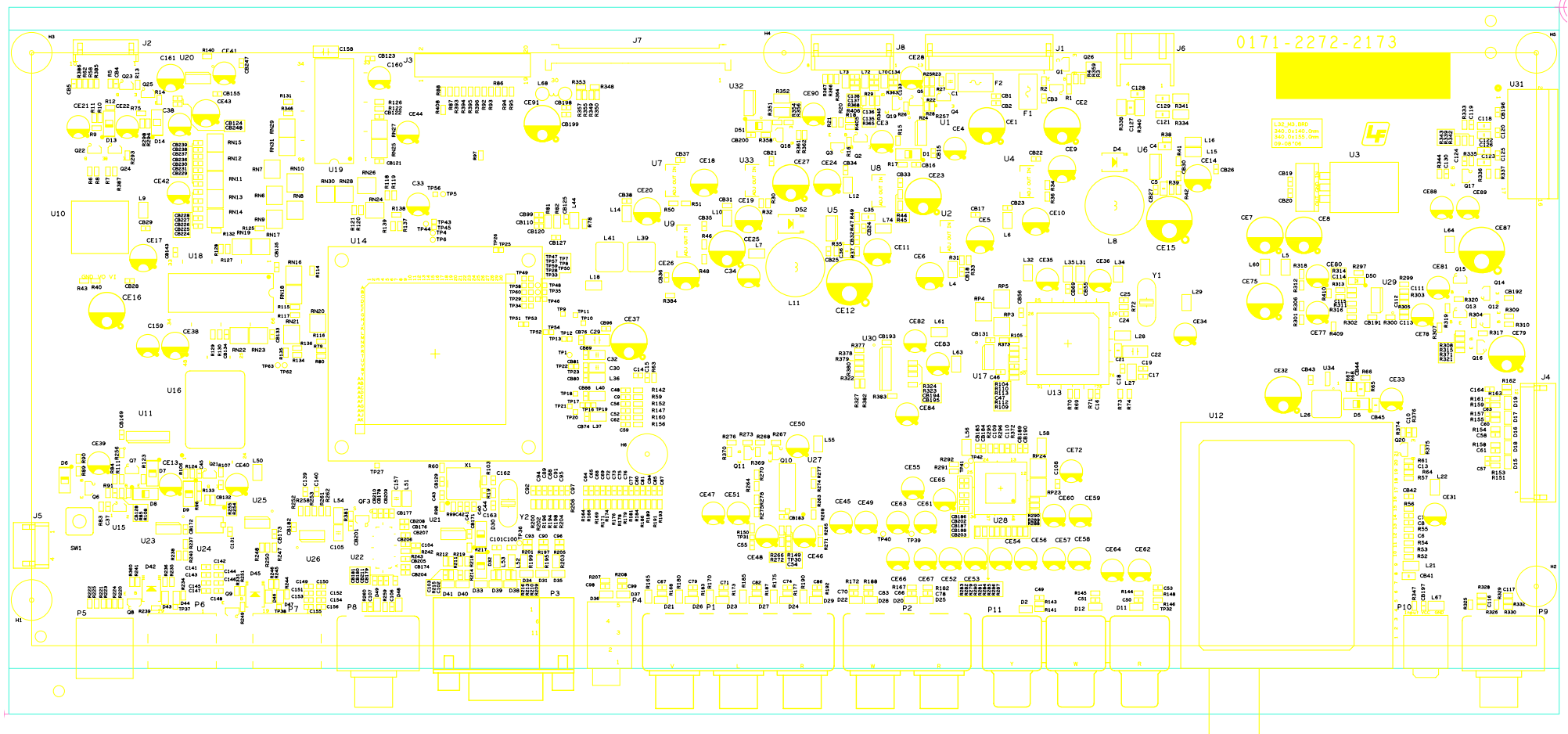


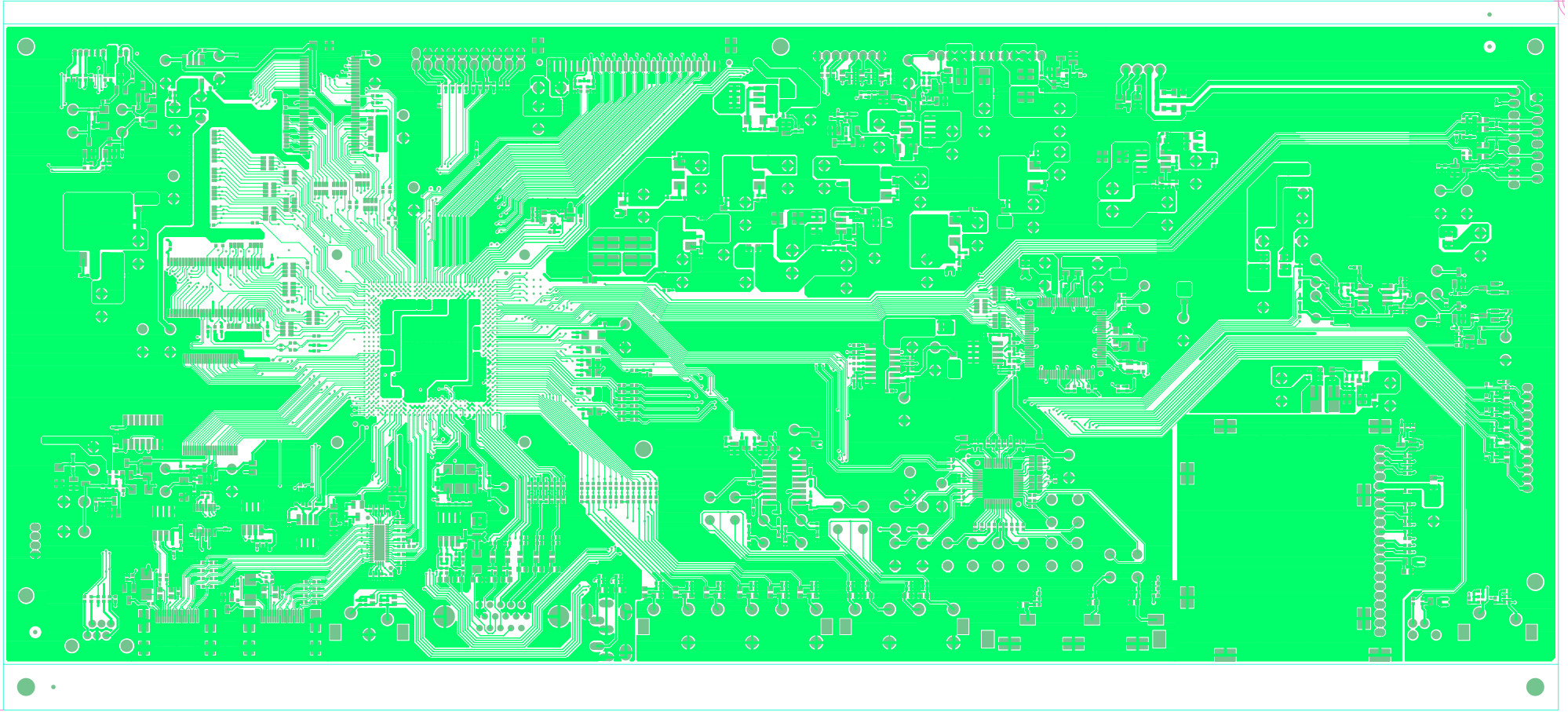


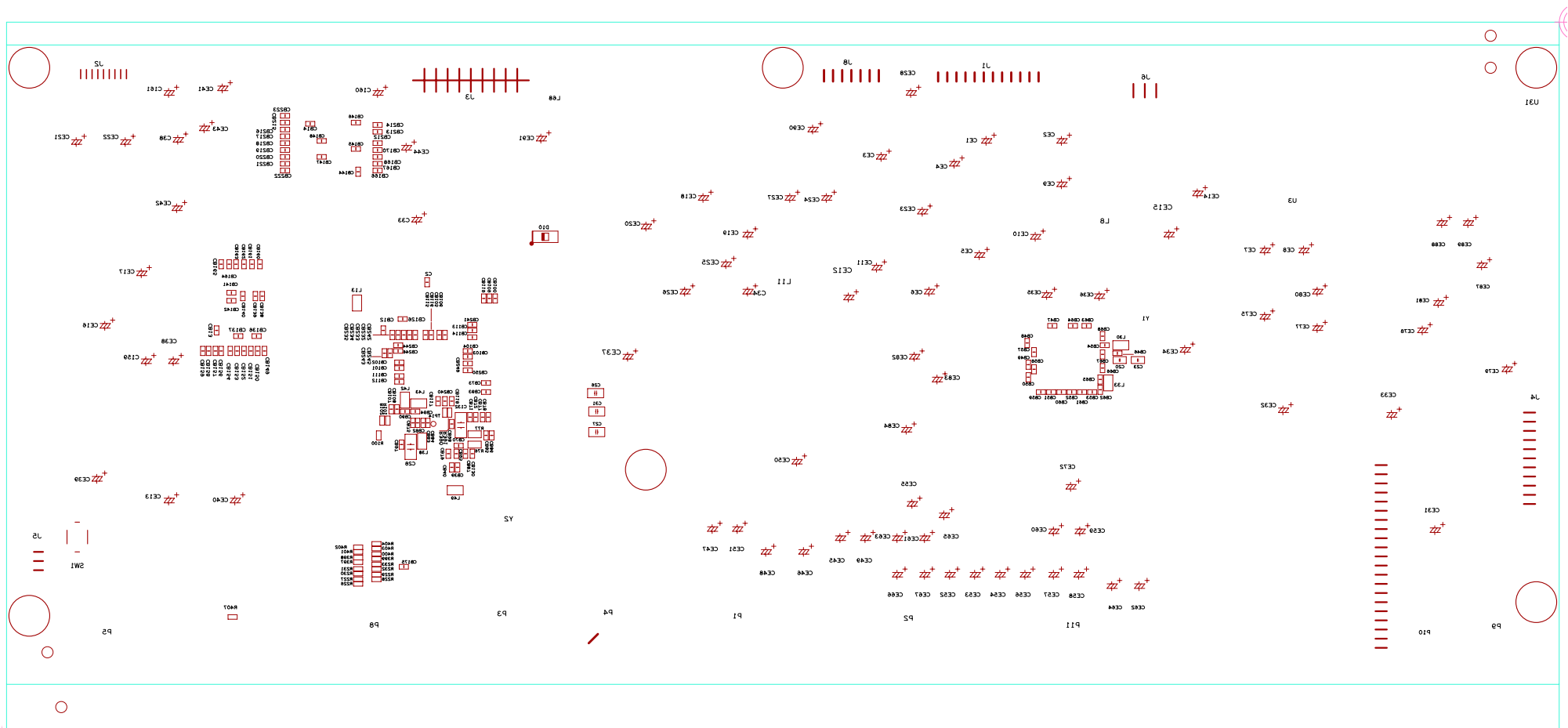


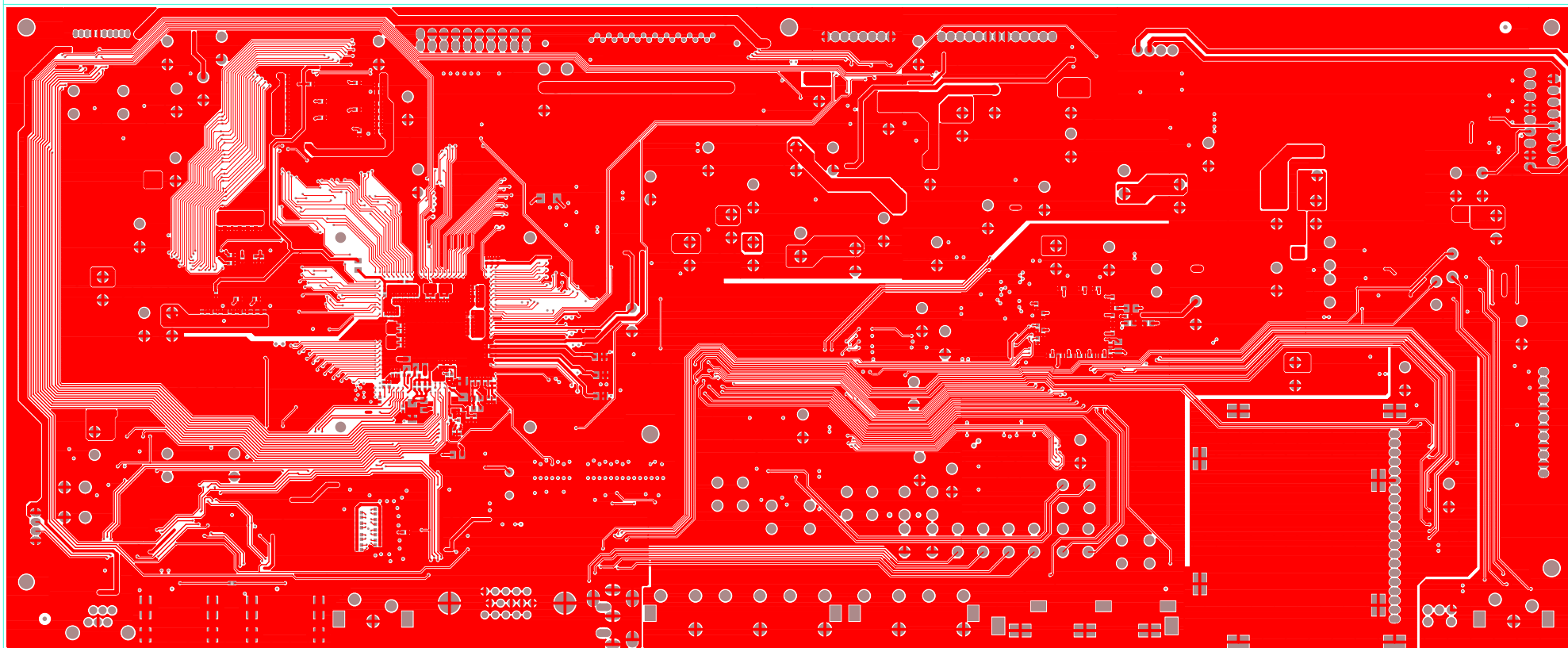


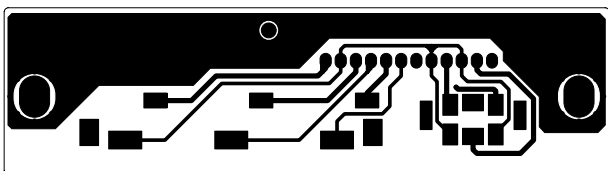
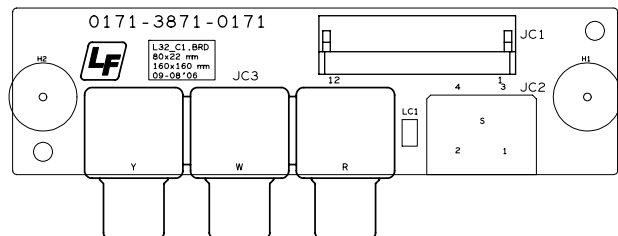
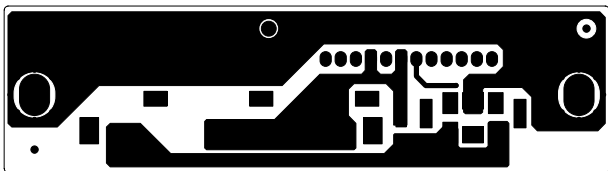










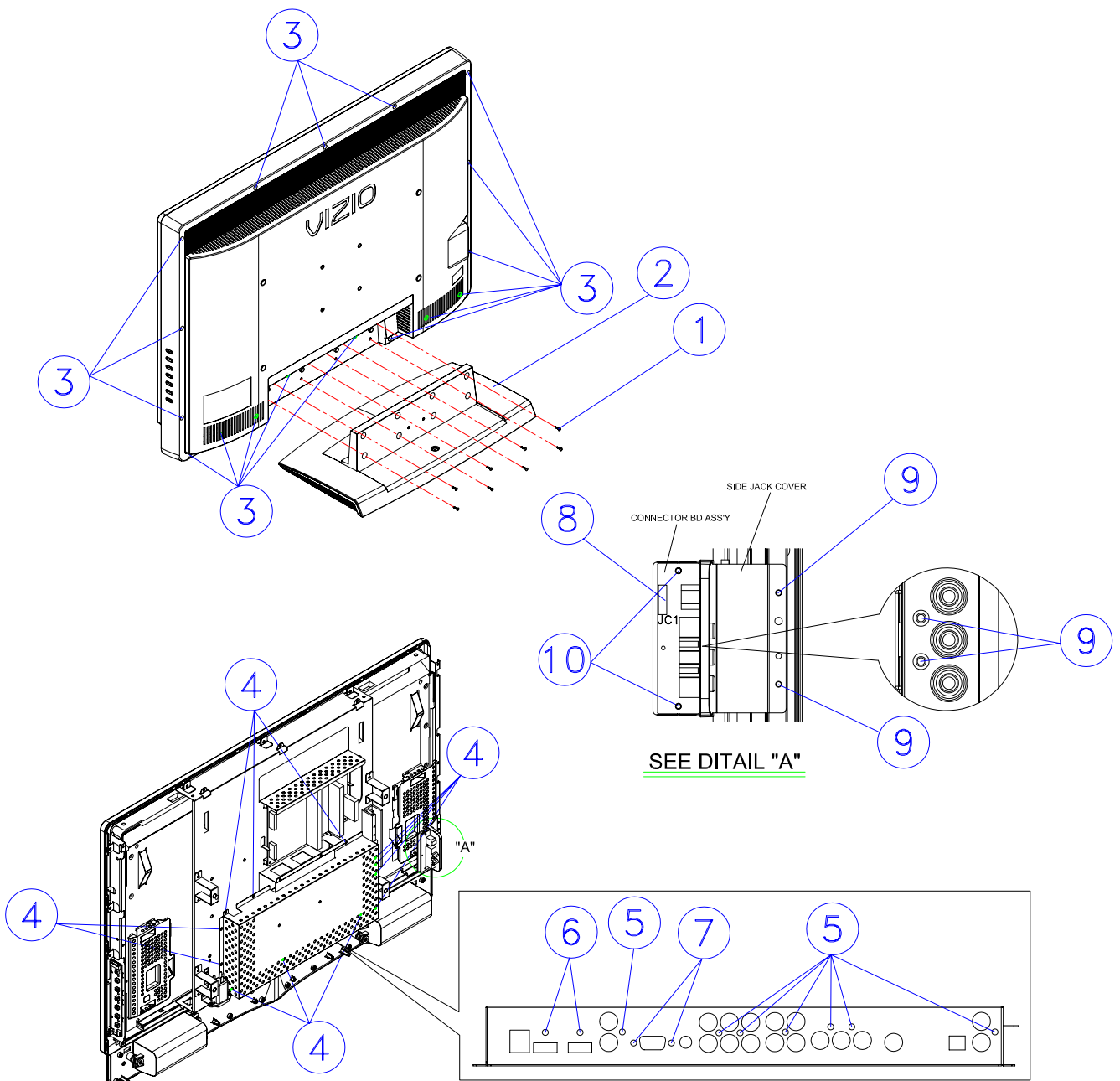


## DISASSEMBLY INSTRUCTIONS

### 1. REAR COVER ASS'Y REMOVAL

*Note: Spread a mat underneath to avoid damaging the TV surface.*

- 1) Remove eight screws ① from Base Ass'y ②.
- 2) Separate the Base Ass'y ②.
- 3) Remove seventeen screws ③ from rear cover.
- 4) Separate the rear cover.
- 5) Remove twelve screws ④ from Main shielding.
- 6) Remove seven screws ⑤, two screws ⑥, and two hexagon screws ⑦ from Main Shielding.
- 7) Separate the Main Shielding.
- 8) See detail "A", Remove the connector ⑧ (JC1) of the connector cable.
- 9) Remove four screws ⑨ and two screws ⑩.
- 10) Separate the Connector Bd Ass'y and sidejack cover.

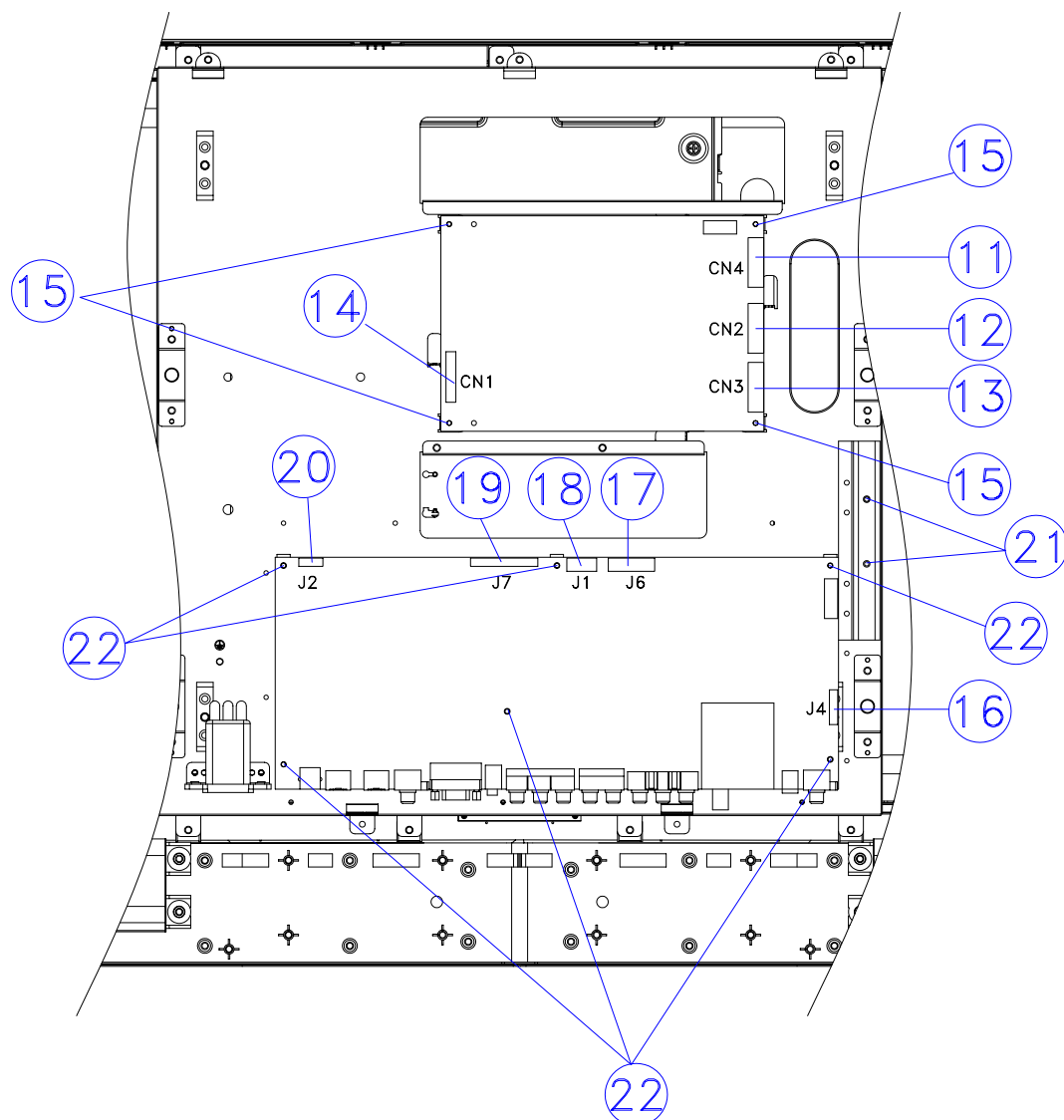


## 2. POWER BD ASS'Y REMOVAL

- 1) Remove the connector ⑫ (CN2) ⑪ (CN4) of the inverter cable.
- 2) Remove the connector ⑬ (CN3) of the power cable.
- 3) Remove the connector ⑭ (CN1) of the power cable 1.
- 4) Remove four screws ⑮ from Power BD ASS'Y .
- 5) Separate the Power BD ASS'Y .

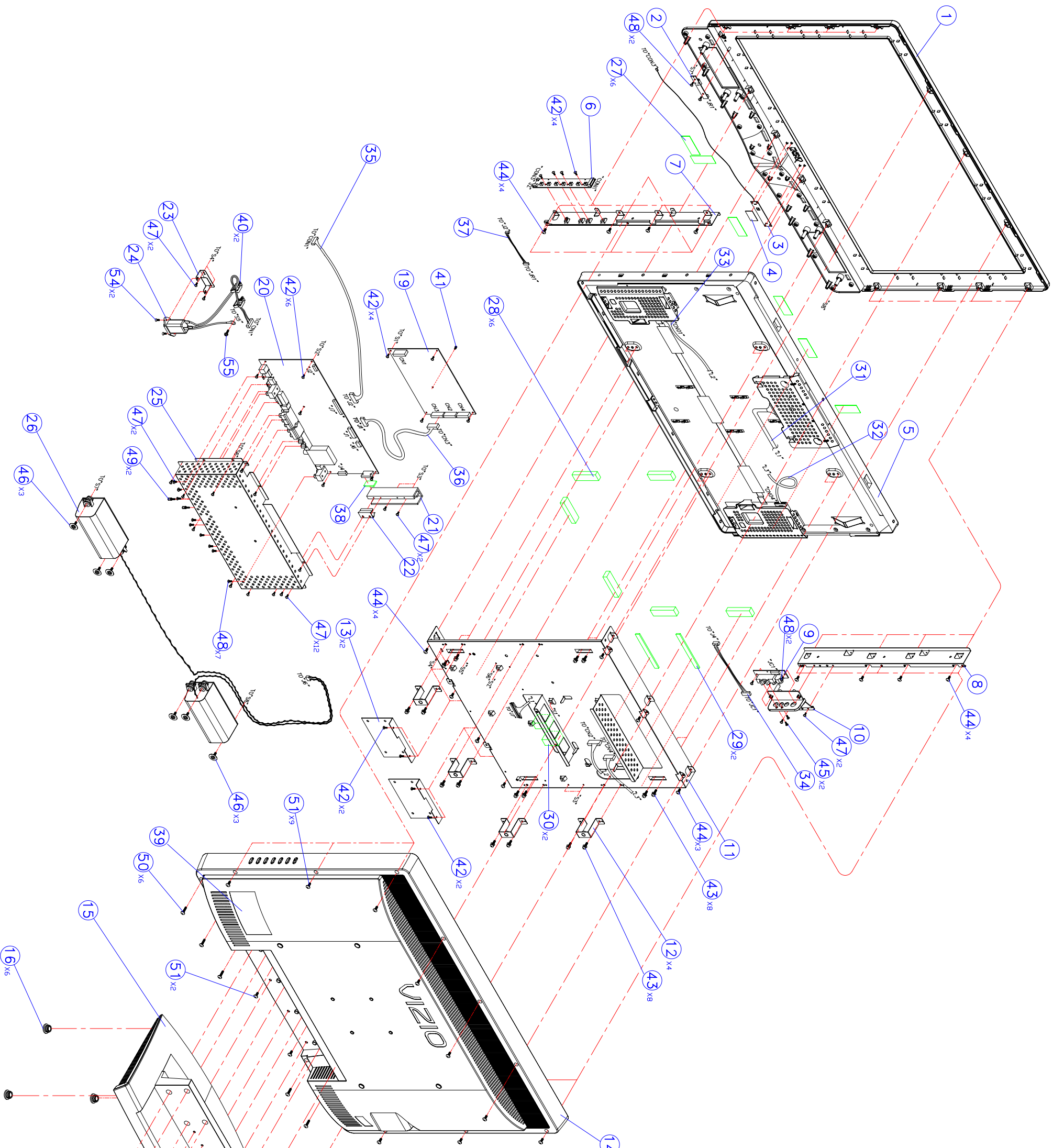
## 3. MAIN BD ASS'Y REMOVAL

- 1) Remove the connector ⑯ (J4) of the Connector cable.
- 2) Remove the connector ⑰ (J6) of the speaker cable.
- 3) Remove the connector ⑱ (J1) of the Power cable.
- 4) Remove the connector ⑲ (J7) of the LVDS cable.
- 5) Remove the connector ⑳ (J2) of the Display cable.
- 6) Remove two screws ㉑ from Heat sink.
- 7) Remove six screws ㉒ from MAIN BD .
- 8) Separate the MAIN BD .





ITEM	PART NO.	DESCRIPTION	QTY
1	1801-0124-3011	FRONT BEZEL(VX32L)(ABS, Piano Black)ASS'Y	1
2	3642-0022-0189	IR BD ASS'Y GV42L HDTV	1
3	0980-0700-00071	LED BACKLIGHT 18*50 LVSB-4916W/SY-E 400mm	1
4	1947-1200-3870	MYLAR(18.0*28.0*0.8)(VX32L)	1
5	0211-0320-1261	LCD MODULE 32.0" LC320W0-1SL01(LG-PHILIPS)(China)	1
6	3632-0012-0156	DISPLAY BD ASS'Y VX32L HDTV	1
7	1712-0101-1170	PANEL HOLDER_L(VX32L_LG)	1
8	1712-0101-1180	PANEL HOLDER_R(VX32L_LG)	1
9	3632-0022-0146	CONNECTOR BD ASS'Y VX32L HDTV	1
10	1701-1933-2010	SIDE JACK COVER(VX32L_LG)(ABS, SONY white)	1
11	1712-0101-1160	CHASSIS(VX32L_LG)	1
12	1712-0101-0590	WALL MOUNT SUPPORT(VX32L)	4
13	1712-0101-1150	BKT FOR SUPPORT(VX32L)	2
14	1801-0214-3010	REAR COVER(VX32L)(ABS, SONY white)ASS'Y	1
15	1801-0524-3010	BASE(VX37L HDTV)(ABS)ASS'Y	1
16	1701-1000-0430	BASE FOOT(TM-32V)	6
17	1701-1500-2500	CABLE CLIP(VX37L)	1
18	1701-0800-2150	REAR PLATE VIZIO VX32L HDTV	1
19	1500-0502-0180	POWER BD ASS'Y0601D03200	1
20	3632-0082-0150	MAIN BD ASS'Y VX32L HDTV_LG(HDCP)	1
21	1712-0400-1920	HEAT SINK(VX37L HDTV)	1
22	1712-0100-4590	HEAT SINK FIX METAL(TM-30A)	1
23	1712-0101-0620	BRACKET FOR AC SOCKET(VX32L HDTV)	1
24	0260-0000-0221	AC INLET+VHRSP 1617#22 500mm 1015#18 100mm+TUBE	1
25	1712-0101-0560	MAIN SHIELD(VX32L)	1
26	0335-1008-0160	SPEAKER 10W 8ohm(126*56*55)+Wire 870/570mm(L,R)	1
27	1947-1200-3900	SPONGE(22.0L*55.0W*0.6)	6
28	1947-1800-0030	GASKET BLOCK(10W*17H*60L)	6
29	1947-1800-0460	GASKET BLOCK(3.0H*10.0W*100.0L mm)	2
30	0460-3430-0991	GASKET BLOCK(17.3*4*25 mm)(77367)	1
31	0460-3430-0991	WH P240430/FI-X30H 20276#30 220mm+吸音材料*2	1
32	0460-4012-0020	WH A2543H12P-PH12P 1007#24 300mm	1
33	0460-4012-0170	WH A2543H00-12P/A2001H02-12P 1007#24 600mm	1
34	0460-1012-0260	WH A2001H02-12P/A2001H02-12P 1061#26 150mm	1
35	0460-3010-0180	WH A1251H02-10P/A1251H02-10P 1571#28 350mm	1
36	0460-4013-0070	WH A2543H13P-PH13P 1007#24 350mm CORE	1
37	0460-1004-0330	WH PH4P-PH4P 1061#26 130mm LF	1
38	1947-1900-0030	HEATPAT(H(25*14mm))	1
39	1936-1100-8780	B/C LBL VIZIO VX32L HDTV	1
40	1701-1500-0690	WIRE SADDLE(CH-14)	1
41	1701-1500-1660	SPACER SUPPORT(DCB-6.5)	2
42	1720-1503-0620	MAC SCREW-MPSWF M3.0*6.0L,Nl	18
43	1720-1504-0820	MAC SCREW-MPSWF M4.0*8.0L,Nl	16
44	1721-0004-0820	TAP SCREW-TP#4.0*8.0L,Nl	15
45	1721-3003-0920	TAP SCREW-MF M3.0*9.0L,Nl	2
46	1721-4104-1220	TAP SCREW-TRF#4.0*12.0L,Nl	6
47	1720-0003-0620	MAC SCREW-MB M3.0*6.0,Nl	20
48	1721-0003-0820	TAP SCREW-TB #3.0*8.0,Nl	11
49	1720-7344-0820	MAC SCREW-MHSW #4-40*8.0L,Nl	2
50	1721-0004-1050	TAP SCREW-TP #4.0*10.0L,BLK-Nl	6
51	1720-0004-1020	MAC SCREW-MB M4.0*10.0L,Nl	11
52	1721-0004-1650	TAP SCREW-TP #4.0*16.0L,BLK-Nl	8
53	1721-0045-1020	TAP SCREW-TP #4.5*10.0L,Nl	2
54	1720-3003-0820	MAC SCREW-MF M3.0*8.0L,Nl	2
55	1720-1204-0820	MAC SCREW-MPGW M4.0*8.0L,Nl	1



UNLESS OTHERWISE NOTED

ESN: OLIVE CHEN

DATE: 12/19/06

CHK:

32" CASE ASS'Y

REV: 0

SHEET: 1 of 1

DESCRIPTION

MODEL NO.

PART NO.

VIZIO VX32L HDTV-LG

9632-8500-3053

TECHNOLOGY Co., LTD.

32" CASE ASS'Y

DATE: 12/19/06

REV: 0

SHEET: 1 of 1

SCALE: Full Unit

DATE: 12/19/06

SCALE: Full Unit

DATE: 12/19/06